

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**PENNSYLVANIA POWER COMPANY
DOCKET NO. R-2016-2537355**

2016 GENERAL BASE RATE FILING

(Volume II of III)

FILED: April 28, 2016

PENNSYLVANIA POWER COMPANY

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**BEFORE THE
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**PENNSYLVANIA POWER COMPANY
DOCKET NO. R-2016-2537355**

**Direct Testimony
of
Thomas J. Dolezal**

List of Topics Addressed

Cost of Service Studies

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1 **Q. What is the purpose of your testimony in this proceeding?**

2 A. My testimony will explain the following: (i) the cost of service principles
3 underlying the COSS; (ii) the methods and procedures employed to perform those
4 studies; and (iii) the results those studies produced. To assure a common
5 understanding of technical terms relevant to the COSS, I have provided a glossary
6 of commonly used terms as Appendix B to my testimony. Terms defined in the
7 glossary are capitalized and denoted in the testimony with an asterisk (*) where
8 first used.

9 **Q. What exhibits are you sponsoring in this proceeding?**

10 A. I am sponsoring Penn Power Exhibits TJD-1 and TJD-2, which consist of the
11 following:

12 **Exhibit TJD – 1** contains the COSS for the Company using the Non-
13 coincident Peak Demand* Allocation Method.* This study was performed
14 using the revenue requirements for the FPFTY and revenues at both
15 existing and proposed rates. It also provides details of the Federal Energy
16 Regulatory Commission’s (“FERC”) Uniform System of Accounts that
17 were employed to record, by account, the components of revenue
18 requirement that formed the basis for the study. This is the same method
19 that Penn Power used most recently in its last base rate proceeding.

20 **Exhibit TJD – 2** contains the supporting studies for functionalizing costs
21 and developing allocation factors used in the COSS. An explanation of

1 the supporting studies is contained within Exhibit TJD-2, and I provide an
2 overview of those studies later in my testimony.

3 **II. GENERAL DESCRIPTION OF COSS PROCESS**

4 **Q. Describe briefly the steps employed in performing a COSS.**

5 A. Typically, a COSS follows the three basic steps prescribed in the *Electric Utility*
6 *Cost Allocation Manual* published by the National Association of Regulatory
7 Utility Commissioners (“NARUC”) for arranging accounting data into a format
8 that facilitates assigning the total cost of service to individual rate schedules or
9 service classifications within an electric utility’s rate structure. These steps
10 consist of the following:

11 1. **Functionalization** is the process of identifying the functions (e.g.,
12 generation, transmission, distribution) associated with a company’s
13 assets used, and expenses incurred, to furnish utility service in order
14 to determine the particular rate schedules that should share
15 responsibility for each of those assets and expenses. Within the
16 distribution function, it may be necessary to separate costs into sub-
17 functions, as I explain later in my testimony.

18 2. **Classification** is the process of classifying costs as customer-related,
19 demand-related, or energy-related in order to facilitate assigning
20 such costs to rate schedules in accordance with identifiable
21 characteristics. The way costs are classified will determine the

1 manner in which they should be allocated to the rate schedules.

2 Some facilities may serve more than one classification and, if so, the
3 costs recorded in those accounts are divided between classifications
4 accordingly.

5 3. **Allocation** is the process of assigning costs to rate schedules based
6 upon measurable characteristics. For example, customer costs
7 generally vary on the basis of the number of customers (or customer
8 accounts) and, therefore, are allocated based on the number of
9 customers (or customer accounts). In some cases, costs can be
10 traced in company records in sufficient detail to directly assign them
11 to a particular rate schedule. Street lighting fixtures are an example
12 of a cost that can be directly assigned.

13 **Q. Please describe the software you used in performing the Penn Power COSS.**

14 A. The COSS was prepared using a model developed internally by FirstEnergy
15 Service Company employing Microsoft Excel as the underlying platform for
16 working with the cost of service data and reporting the results of the COSS.

17 **Q. How are the results of the COSS intended to be used in developing proposed**
18 **rates?**

19 A. As explained by Kevin M. Siedt in Penn Power Statement No. 3, the COSS
20 provides the starting point for the development of Penn Power's Rate Design.* A
21 COSS allocates a company's total cost of service to each of its rate schedules.

1 The cost of service for each rate schedule is compared to the revenues produced,
2 or projected to be produced, under existing rates. For purposes of my COSS, pro
3 forma revenues for the FPFTY were furnished by Mr. Siedt. From these inputs,
4 the earnings level, typically expressed in the form of a class rate of return or
5 Unitized Return,* is calculated for each rate schedule. These data indicate, based
6 on a snapshot at a single point in time, whether a particular rate schedule is
7 providing revenue that is less than, equal to, or more than the cost to furnish
8 service to customers on that rate schedule.

9 As Mr. Siedt explains, the rate designer uses the results of the COSS along with
10 various other factors and the exercise of professional judgment to determine the
11 portion of the total revenue increase assigned to each rate schedule. Once the
12 revenue increases, by rate schedule, are determined, the COSS is used to calculate
13 the resulting rates of return, by rate schedule, under proposed rates. Comparing
14 the results of the COSS under existing and proposed rates provides an indication
15 of whether, and to what extent, the proposed increases move each rate schedule
16 closer to its cost of service. Also, because the COSS provides a breakdown of
17 costs by classification (e.g., customer-related or demand-related) for each rate
18 schedule, the results of the COSS are used to identify the level of costs that should
19 be recovered in each component of a rate (e.g., customer charge or demand
20 charge).

21 **Q. What allocation method was used in the COSS to allocate demand-related**
22 **costs among rate schedules?**

1 A. The non-coincident peak demand allocation method was used to allocate costs
2 classified as demand-related. As its name implies, this method allocates demand
3 costs among rate schedules in proportion to their non-coincident peak demands.
4 As employed by Penn Power, this method allocates demand costs for certain large
5 distribution plant accounts based on the non-coincident peak demands of three
6 groups of customers served by the Company.

7 The first group, identified as "PRI" in the COSS, consists of customers that
8 receive service at primary voltage and, therefore, use only the Primary
9 Distribution* system. The second group, identified as "SEC" in the COSS,
10 consists of those customers that receive service at secondary voltage but use both
11 primary distribution and Secondary Distribution* plant assets to obtain that
12 service. The third group, identified as "PRI_SEC" in the COSS, consists of all
13 customers using the distribution system or, in other words, the aggregate of the
14 PRI and SEC groups. The manner in which these groupings are used to allocate
15 sub-functionalized costs is discussed later in my testimony.

16 **Q. Have you prepared a diagram that illustrates how customers in each of the**
17 **three groups discussed above and the facilities serving them were identified?**

18 A. Yes. Appendix C to my testimony is a realistic representation of a portion of a
19 distribution system showing how primary and secondary facilities are used to
20 serve each of the three groups of customers. As Appendix C shows: (1) portions
21 of the primary distribution system serve only primary voltage customers; (2)
22 portions of the primary distribution system serve both primary and secondary

1 voltage customers; and (3) portions of the primary distribution system are used
2 only to deliver power to the secondary distribution system and, therefore, serve
3 only secondary voltage customers. Appendix C also shows that the secondary
4 distribution system serves only secondary voltage customers.

5 **III. DETAILED DESCRIPTION OF THE COSS PRESENTED IN THIS CASE**

6 **Q. Please describe Exhibit TJD-1.**

7 A. Exhibit TJD-1 is divided into two sections, as follows:

8 **Section 1** contains the COSS based on revenues at existing rates. Page 1 shows
9 the calculation of each rate schedule's rate of return. The remainder of Section 1
10 shows in detail how each FERC account associated with the line items on page 1
11 was functionalized and how each functionalized cost was allocated among rate
12 schedules.

13 **Section 2** shows the results of the COSS based on revenues at proposed rates, as
14 well at the revenues required for each rate schedule to produce a rate of return
15 equal to Penn Power's claimed overall rate of return. Page 1 shows the
16 calculation of each rate schedule's rate of return at proposed rates, and page 2
17 shows the calculation at rates of return equal to Penn Power's claimed overall rate
18 of return. Associated income taxes are also shown on each page.

19

1 **Q. Please describe Exhibit TJD-2.**

2 A. Exhibit TJD-2 contains the supporting studies used to develop the COSS. A brief
3 description of each supporting study is provided below. A more detailed
4 description of each supporting schedule is provided in Exhibit TJD-2.

Study No.	Title	Description
1	Demand Allocators	This study develops the allocation factors for distribution plant.
2	Plant Functionalization (Accounts 301-303, 389-398)	This study shows how general plant was functionalized.
3	Customer Deposits Allocation	This study allocates among rate schedules customer deposits, which are treated as a rate base deduction in developing revenue requirement.
4	Customer Account and Information Expenses Allocation	This study allocates expenses in the applicable accounts to rate schedules based on straight or weighted customer counts.
5	Labor (O&M)	This study identifies the labor component of operation and maintenance expenses by FERC account.
6	Meter Plant Allocation (Account 370)	This study allocates the cost of metering equipment to rate schedules.
7	Minimum Grid and Primary/Secondary Studies	Two studies are set forth in this portion of Exhibit TJD-2. The minimum grid study determines the cost of minimum-sized distribution facilities recorded in FERC Plant Accounts* 364-368. The primary/secondary study shows how the cost of distribution assets recorded in FERC Plant Accounts 364-367 was divided into two parts corresponding to: (1) the cost of distribution plant used to furnish service to customers that use only primary distribution facilities; and (2) the cost of distribution plant used to furnish service to customers that use both primary distribution and secondary distribution facilities.

8	Street Lighting Study	This study allocates the costs recorded in FERC Plant Accounts 364 (distribution poles) to street lighting customers.
9	Allocation of Other Revenue	This study functionalizes other revenues.
10	Line Losses	This study shows the line losses that are stated in Penn Power's Electric Generation Supplier Coordination Tariff.
11	Customer Uncollectible Allocation (Account 904)	This study allocates the uncollectible accounts expense to rate schedules.

1 **Q. Please describe the function(s) included in the COSS.**

2 A. Following the restructuring of the electric industry in Pennsylvania, Penn Power
3 ceased to own or operate generating facilities used to provide jurisdictional retail
4 service in the state. Transmission facilities are subject to FERC jurisdiction and
5 are under the operational control of PJM Interconnection LLC, which is the
6 FERC-approved regional transmission organization for Penn Power's control
7 area. Penn Power currently has no transmission facilities because they were
8 transferred to American Transmission Systems, Inc. in 2000.¹

9 **Q. Was there a need to further divide the distribution function into sub-**
10 **functions?**

11 A. Yes. The functionalized distribution plant data did not provide adequate detail
12 because customers take service at different voltage levels. Therefore, it was
13 necessary to sub-functionalize distribution plant costs recorded in FERC Plant
14 Accounts 361 – 368 based on voltage peak responsibility to properly allocate such
15 costs among rate schedules. Supporting Study No. 7 includes the study conducted

¹*Application Of Pennsylvania Power Co. For (1) A Certificate Of Public Convenience Authorizing The Transfer Of Certain Transmission Assets To American Transmission Systems, Inc., And (2) Approval Of Certain Affiliated Interest Agreements Necessary To Effect The Transfer, Docket No. A-110450F0016 (Order entered July 14, 2000).*

1 to sub-functionalize those accounts. This study sub-divided the plant accounts
 2 into amounts to be apportioned between primary service voltage rate schedules
 3 included in the PRI and SEC groups. The following table shows how cost
 4 responsibility is shared among the three groups I previously identified with
 5 respect to each of the aforementioned plant accounts:

ACCOUNT	DESCRIPTION	GROUP
361	Structures	PRI_SEC
362	Station Equipment	PRI_SEC
364P	Poles-Primary	PRI
364S	Poles-Secondary	SEC
364Z	Poles-Streetlight	SEC
365P	Primary Overhead Conductor	PRI
365S	Secondary Overhead Conductor	SEC
366P	Primary Underground Conduit	PRI
366S	Secondary Underground Conduit	SEC
367P	Primary Underground Conductor	PRI
367S	Secondary Underground Conductor	SEC
368	Transformers	SEC

6 **Q. How was the sub-functionalization performed?**

7 A. As more fully explained in Supporting Study No. 7, the sub-functionalization was
 8 done by tracing distribution circuits from primary power customers back to the
 9 substations that serve them and identifying the portions of the primary distribution
 10 facilities that are used by such primary power customers. The remainder of the
 11 primary distribution system, which is not used by these customers, serves only
 12 secondary voltage load.

1 **Q. Please describe classification, which is the second step in the development of**
2 **the COSS.**

3 A. Penn Power adhered to, and followed, the NARUC Cost Allocation Manual and
4 the cost of service principles set forth therein to classify its distribution assets and
5 operating costs. The NARUC Cost Allocation Manual (pp. 96-98) states that an
6 electric utility's distribution-related facilities are, from a design and operational
7 perspective, sized to meet the maximum kW load (demand) requirements of
8 customers. In addition, the NARUC Cost Allocation Manual (p. 89) states that all
9 distribution costs should be classified as either customer or demand-related, or as
10 a combination of those two factors. In accordance with NARUC's
11 recommendations, Penn Power sub-functionalized its facilities into primary and
12 secondary voltage level components as discussed previously and, with respect to
13 distribution mass property accounts (Plant Accounts 364-369), identified the
14 customer and demand-related components.

15 **Q. How were the customer and demand components determined?**

16 A. As the NARUC Cost Allocation Manual also recommends, the customer
17 component was determined by a minimum grid study, which is set forth in
18 Supporting Study No. 7. A minimum grid study identifies the costs of poles,
19 conductors, and transformers of the minimum size that would be required to serve
20 a customer. The remainder of the costs recorded in each account therefore
21 comprises the demand component. The customer component is allocated to rate

1 schedules based on the number of customer accounts. The demand component is
2 allocated on the basis of non-coincident peak demands.

3 **Q. Please describe the process of allocation, which is the third step in the**
4 **development of the COSS.**

5 A. Sub-functionalized, classified costs are allocated among rate schedules based
6 upon measurable characteristics. The method used to allocate costs in each
7 account included in the COSS is shown in Section No. 1 of Exhibit TJD-1 on
8 pages 59-68. In some cases, the allocation factor for a particular account was
9 developed by aggregating the allocation of a group of other accounts, which is
10 referred to as a “pattern group.” This is done when the account being allocated
11 exhibits characteristics that are a blend of the various characteristics of each
12 account in the pattern group. In some instances, allocation is not used because
13 Penn Power has recorded costs in sufficient detail to be able to directly assign
14 those costs to one or more rate schedules. This is the case with Plant Account
15 373, which is directly assigned to street lighting customers because the facilities
16 represented by costs recorded in that account serve street lighting customers
17 exclusively.

18 **Q. Why was the non-coincident peak demand method used to allocate demand-**
19 **related distribution costs?**

20 A. Load diversity affects system design and, therefore, consistent with cost-causation
21 principles, it also influences how costs are allocated among rate schedules. At the
22 very highest voltage levels of the electric grid – specifically, the bulk transmission

1 portion – individual customer and customer class loads are consolidated within
2 the totality of energy moving on the system. At this level, load is considered to be
3 the most diverse because the peak loads of any individual customer or class are
4 most likely occurring at times that do not coincide with the overall system peak.
5 Moving down the delivery system from bulk transmission to the distribution of
6 electricity to a customer location, load becomes less diverse; that is, the peak for
7 total load on the distribution facilities is much more likely to coincide with
8 customers’ peak load. In other words, because distribution facilities serve load
9 that is much more localized than the consolidated loads served at the bulk
10 transmission level, distribution facilities must be sized to meet maximum
11 demands that can be, and often are, imposed on them at any time of the year, not
12 just at the time of the system coincident peak. This characteristic of the
13 distribution system and the loads it carries warrants the use of non-coincident
14 peak demand to allocate demand-related costs, as the NARUC Cost Allocation
15 Manual (p. 97) expressly provides:

16 Local area loads are the major factors in sizing distribution
17 equipment. Consequently, customer-class noncoincident
18 demands (NCPs) and individual customer maximum demands are
19 the load characteristics that are normally used to allocate the
20 demand component of distribution facilities.
21
22

23 **Q. How did Penn Power determine non-coincident peak demands?**

24 A. The Load Data* available to Penn Power makes it possible for it to identify with
25 reasonable accuracy the maximum non-coincident peak demands of each rate
26 schedule.

1 **Q. How were meter costs allocated?**

2 A. Costs recorded in Account 370 – Meters were allocated based on the number of
3 customers. However, different customer rate classifications employ different
4 types of meters, and such meter types vary in cost. Accordingly, Supporting
5 Study No. 6 was conducted to develop allocators to ensure that meter costs are
6 properly divided among Penn Power’s rate classes. First, a meter count by rate
7 schedule was calculated. Next, an average meter cost by rate schedule was
8 calculated, which incorporates all meter costs, including labor, materials and
9 potential transformer/current transformer costs when applicable. A weighting
10 factor per rate schedule was developed by using the residential average meter cost
11 as a baseline. The meter count was then multiplied by the weighting factor to
12 produce the final allocator.

13 **Q. Were any adjustments made to average meter costs to reflect the increased**
14 **deployment of smart meters in Penn Power’s service territory by the end of**
15 **the fully projected future test year?**

16 A. Yes. In accordance with Act 129 of 2008 and its Commission-approved Smart
17 Meter Deployment Plan,² Penn Power installed smart meters at roughly 99% of its
18 customers’ premises across its service territory in 2015. Penn Power anticipates
19 that, as part of the Company’s full-scale deployment efforts, smart meters will be
20 installed at approximately 100% of such premises by the end of 2017. Costs of
21 legacy meters typically used by large commercial and industrial customers are

² *Joint Petition of Metropolitan Edison Co., Pennsylvania Elec. Co., Pennsylvania Power Co. and West Penn Power Co. For Approval of Their Smart Meter Deployment Plan*, Docket Nos. M-2013-2341990, M-2013-2341991, M-2013-2341993 and M-2013-2341994 (Order entered June 15, 2014).

1 more closely aligned with smart meter costs than less expensive meters used by
2 residential and small commercial customers. Study No. 6 develops an adjustment
3 to the average meter cost component of the allocator to account for those cost
4 differences. This adjustment first compares the actual cost of the legacy meters
5 used to serve customers in each rate classification and the cost of smart meters for
6 that rate classification. Then, the adjustment to average meter costs is calculated
7 by applying the overall projected level of smart meter deployment in Penn
8 Power's service territory (i.e., 100%) to the average cost differential between
9 legacy meters and smart meters by rate class. Details of the development of the
10 final cost-weighted allocation factors are set forth in Supporting Study No. 6.

11 **Q. How were costs allocated for Accounts 360, 369, 370, 371, 373?**

12 A. Costs recorded in Account 360 – Land and Land Rights were allocated using the
13 distribution plant accounts 361 to 369 as a pattern group. That is, the costs in that
14 account were allocated in proportion to the totality of those other plant costs.
15 Costs recorded in Account 369 – Services were allocated on a customer basis to
16 all secondary customers because each secondary customer has a service and this
17 method of allocation is consistent with the NARUC Cost Allocation Manual's
18 approach. While the NARUC Cost Allocation Manual (p. 96) notes that the cost
19 of customer services could also be allocated on a customer basis pursuant to a
20 minimum grid determination of the customer component with the remainder
21 allocated based on demand, Penn Power does not have the data needed to perform
22 a minimum grid study for services. Costs recorded in Account 370 were allocated
23 based on a meter-cost weighting of the number of customers, as explained in more

1 detail in Supporting Study No. 6. Costs recorded in Accounts 371 and 372 were
2 directly assigned to the area lighting rate schedule. Costs recorded in Account
3 373 were directly assigned to the street lighting rate schedules, as I previously
4 noted.

5 **Q. How was FERC Account 904 (Uncollectible Accounts Expense) allocated in**
6 **the Company's COSS?**

7 A. Uncollectible accounts expense recorded in Account 904 is an accrual calculated
8 on a total-Company basis. Class or rate schedule-specific accruals are not
9 calculated and not available. However, the dollar amounts of accounts receivable
10 written off are available for each rate schedule and are reasonably related to the
11 accrual for uncollectible accounts expense recorded on a total Company basis in
12 Account 904. Accordingly, Penn Power used historic test year accounts
13 receivable write-offs to develop a weighting to take into account each rate
14 schedule's contribution to the total uncollectible accounts accrual, as further
15 detailed in Supporting Study No. 11.

16 **Q. Please summarize the results of the COSS.**

17 A. The rates of return and unitized returns for each of Penn Power's rate schedules
18 at existing and proposed rates are summarized in the chart below:

COSS Rates of Return - Penn Power					
COSS Rates of Return			COSS Rates of Return - Unitized		
Rate	Existing	Proposed	Rate	Existing	Proposed
PP_RS	3.5%	8.6%	PP_RS	1.06	0.99
PP_GSR	10.8%	18.5%	PP_GSR	3.24	2.13
PP_GSS	1.0%	6.5%	PP_GSS	0.29	0.74
PP_GSM	5.5%	11.5%	PP_GSM	1.67	1.32
PP_GSL	11.0%	18.0%	PP_GSL	3.30	2.06
PP_GP	-4.4%	2.1%	PP_GP	(1.31)	0.24
PP_PNP	8.3%	12.0%	PP_PNP	2.48	1.38
PP_POL	1.6%	5.9%	PP_POL	0.48	0.68
PP_STLT	-0.6%	1.2%	PP_STLT	(0.19)	0.14
PP_GT	93.9%	144.3%	PP_GT	28.25	16.59
Total Retail	3.3%	8.7%	Total Retail	1.00	1.00

1 Q. Does this conclude your direct testimony?

2 A. Yes, it does.

Appendix A

Thomas J. Dolezal
Rates Analyst
FirstEnergy Corporation
76 South Main Street
Akron, Ohio 44308
330.384.2593

SUMMARY

I am a Rates Analyst in Load Forecasting & Analytics, where I have been responsible for developing and preparing the load and revenue forecast for Met-Ed, Penelec, Penn Power, and West Penn Power. Additionally, I have been responsible for several projects related to metered-but-unbilled sales and revenues, regulatory financial analysis, load research and forecasting, energy efficiency, distributed generation, electric vehicles, customer bill estimation, and many other analytical projects.

PROFESSIONAL EMPLOYMENT

2012 to Present **FirstEnergy Service Company**
Rates Analyst – Rates and Regulatory Affairs

PROFESSIONAL AWARDS

2014 President's Award- for development of the metered-but-unbilled process. This is FirstEnergy's highest award, given for "Performance, innovation, or contributions that demonstrate a higher level of commitment or operation – above and beyond what would normally be expected."

PROFESSIONAL ORGANIZATION BOARD POSITIONS

2014 to Present **White Pond Toastmasters**
Treasurer

2016 to Present **FirstEnergy Young Professionals**
Vice President

Appendix A

EDUCATION / CERTIFICATIONS

University of Akron, BA, Economics, 2009

University of Akron, Second Major, Statistics, 2009

University of Akron, MA, Economics, 2011

American Public Power Association Basic Utility Cost of Service & Retail Rate
Design, 2015

American Public Power Association Intermediate Utility Cost of Service & Retail
Rate Design, 2015

American Public Power Association Advanced Utility Cost of Service & Retail Rate
Design, 2015

Morgan Stanley Advanced Accounting, Modeling, and Valuation Training, 2016

Appendix B

Glossary of Terms

Allocation Method – A theoretical basis for apportioning a cost that is incurred to provide service to all customers or a sub-set of customers.

Load Data – Typically expressed in Megawatts, Kilowatts, Megawatt Hours or Kilowatt Hours, this represents the amount of peak demand or total energy consumption imposed on a utility system by a customer group or rate schedule.

Non-coincident Peak Demand – The maximum demand of a rate schedule at any time. This demand may or may not be at the time of the coincident peak demand.³

Plant Account – A component of the accounting system under which property used to provide utility service is grouped for accounting purposes according to a defined set of common characteristics.

Primary Distribution – The portion of the electric distribution system that consists of conductors, poles, transformers, and associated plant that distributes service at voltage levels lower than transmission facilities and higher than secondary distribution facilities.

Rate Design – The development of tariff rates that, when applied to billing determinants, produce a total authorized revenue requirement.

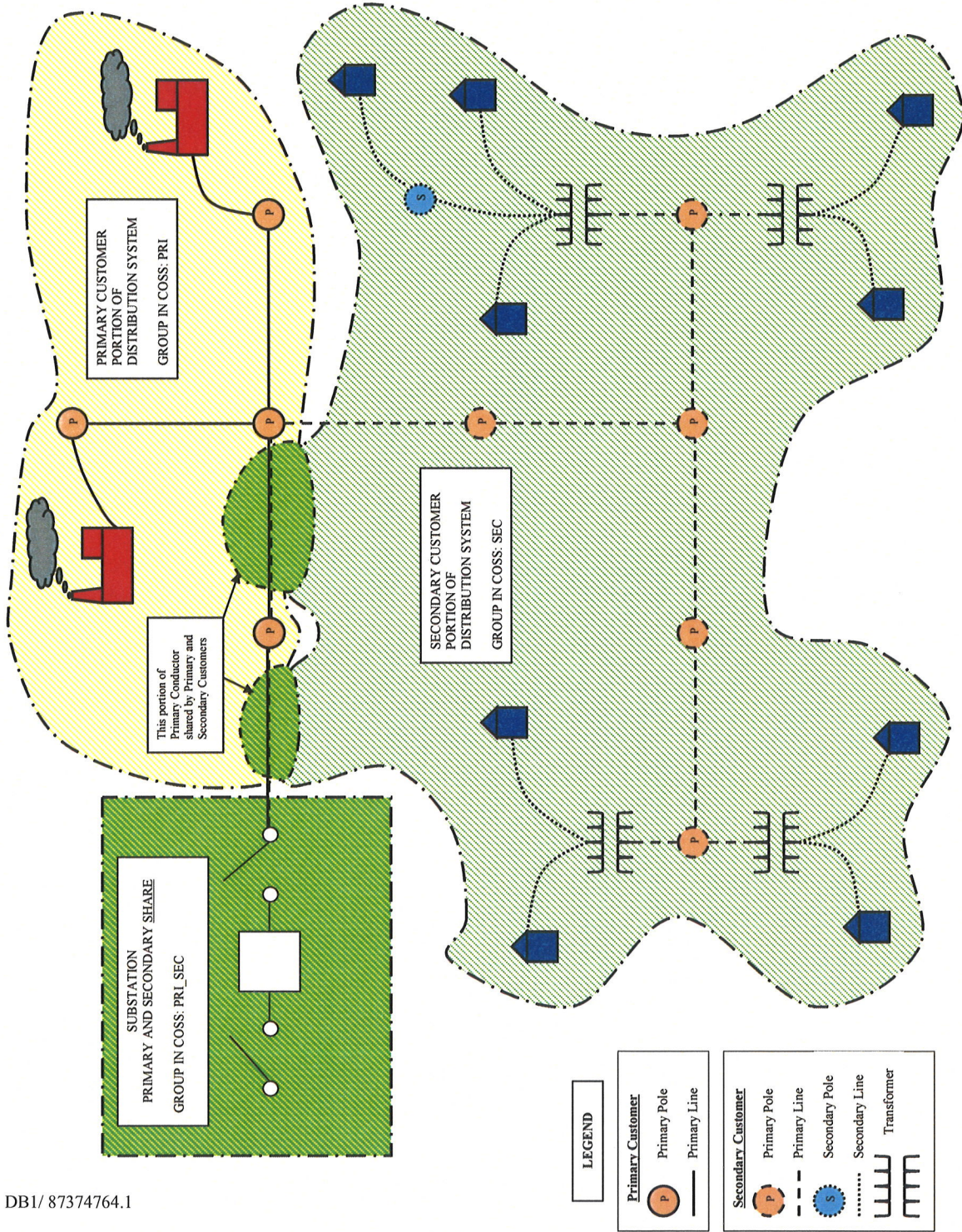
Secondary Distribution – The portion of the electric distribution system that consists of conductors, poles, transformers and associated plant that distributes service at voltage levels lower than Primary Distribution Facilities.

Unitized Return – The ratio of the individual rate schedule rate of the return to the Company overall rate of return.

³ Coincident peak demand is defined as the demand of a rate schedule at the time of the Company's maximum hourly demand.

Appendix C

Primary/Secondary Diagram



Penn Power
Exhibit TJD – 1
Witness: T. J. Dolezal

Cost of Service Study

Penn Power Exhibit TJD – 1
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PENNSYLVANIA POWER COMPANY
COST OF SERVICE STUDY - TOTAL SUMMARY
FULLY FUTURE TEST YEAR
COMPANY PREFERRED ALLOCATION METHOD
PRESENT RATES, \$1,000s

	TOTAL	RS	GSR	GSS	GSM	GSL	GP	OH	PNP	POL	STLT	GT
RATE BASE												
Plant in Service	698,940	492,365	301	38,442	79,055	19,952	42,491	-	448	6,211	18,641	1,034
Depreciation Reserve	199,862	140,591	85	10,844	22,917	5,860	9,700	-	128	3,308	6,259	168
Net Plant	499,078	351,774	215	27,598	56,138	14,092	32,791	-	320	2,903	12,382	866
Rate Base Additions	39,084	27,686	17	2,210	4,253	1,044	2,413	-	25	309	934	192
Rate Base Deductions	124,643	87,106	54	6,873	14,965	3,479	7,281	-	82	1,098	3,321	384
Rate Base Other Total	(85,560)	(59,419)	(37)	(4,663)	(10,712)	(2,435)	(4,867)	-	(57)	(790)	(2,387)	(192)
Rate Base Total	413,519	292,355	178	22,935	45,426	11,657	27,923	-	264	2,113	9,995	673

INCOME STATEMENT

Revenue												
Tariff Revenue Total	90,994	67,799	61	3,830	10,502	3,623	2,621	-	76	388	747	1,347
Other Revenue Total	3,196	2,613	1	195	211	23	129	-	2	13	7	2
Retail Total	94,190	70,412	62	4,025	10,713	3,646	2,749	-	78	401	754	1,349
Expenses												
Total Operation & Maintenance Expense	36,806	28,725	13	1,821	2,622	465	2,871	-	18	120	115	35
Depreciation Expense	24,387	17,004	11	1,357	2,808	717	1,490	-	16	199	707	78
Other Expenses Amortization Expense Total	1,700	1,228	1	106	160	36	124	-	1	0	0	43
Taxes Other than Income Taxes Excl GRT	853	634	0	46	77	17	60	-	0	5	11	1
Gross Receipts Tax	5,369	4,000	4	226	620	214	155	-	5	23	44	79
Total Operating Expense	69,114	51,591	29	3,557	6,288	1,449	4,700	-	40	347	877	236
Income Before Taxes	25,076	18,821	33	469	4,425	2,197	(1,950)	-	38	53	(124)	1,113
Income taxes												
Current State Income Tax	2,203	1,680	3	31	401	207	(217)	-	4	5	(25)	115
Current Federal Income Tax	2,778	2,355	8	(133)	800	537	(933)	-	9	(23)	(196)	355
Provision for Deferred Income Taxes	6,351	4,484	3	353	706	175	415	-	4	37	161	11
Investment Tax Credit Adjustments	-	-	-	-	-	-	-	-	-	-	-	-
Total Income Tax	11,333	8,520	14	251	1,907	919	(735)	-	16	20	(60)	481
Net Income After Tax	13,743	10,301	19	218	2,518	1,278	(1,215)	-	22	34	(64)	632
Rate of Return	3.32%	3.52%	10.76%	0.95%	5.54%	10.96%	-4.35%		8.25%	1.60%	-0.64%	93.88%

**PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 PLANT IN SERVICE, \$1,000s**

ACCOUNT	DESCRIPTION	DETAILED ACCOUNT	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
Intangible Plant															
301	Organization	DIST_CUST	17	0	17	13	0	1	1	0	1	0	0	1	0
		DIST_DEMAND	6	0	6	3	0	0	2	1	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	23	0	23	16	0	1	3	1	1	0	0	1	0
302	Franchise and Consents	DIST_CUST	51	0	51	40	0	3	3	0	4	0	0	2	0
		DIST_DEMAND	17	0	17	9	0	1	5	2	1	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	69	0	69	48	0	4	8	2	4	0	0	2	0
303	Intangible Plant	DIST_CUST	16,779	0	16,779	13,806	5	821	743	25	1,258	7	56	42	16
		DIST_DEMAND	2,105	0	2,105	1,037	1	79	562	204	211	2	3	6	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	18,883	0	18,883	14,843	6	899	1,305	229	1,469	9	59	48	16
		Int Original Cost Plant	16,847	0	16,847	13,859	5	825	746	25	1,263	7	57	45	16
		DIST_DEMAND	2,128	0	2,128	1,048	1	80	569	207	212	2	3	6	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	18,975	0	18,975	14,907	7	905	1,315	231	1,475	9	59	51	16
Distribution Plant															
360	P - Land	DIST_CUST	4,624	0	4,624	3,710	2	292	242	4	295	2	21	56	0
		DIST_DEMAND	1,757	0	1,757	911	1	69	494	179	92	2	2	5	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	6,381	0	6,381	4,621	3	361	736	184	388	4	23	61	0
361	P - Structures	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	1,776	0	1,776	895	1	68	485	176	142	2	2	5	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	1,776	0	1,776	895	1	68	485	176	142	2	2	5	0
362	P - Station	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	56,321	0	56,321	28,370	32	2,156	15,390	5,588	4,486	59	77	162	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	56,321	0	56,321	28,370	32	2,156	15,390	5,588	4,486	59	77	162	0

PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 PLANT IN SERVICE, \$1,000s

ACCOUNT	DESCRIPTION	DETAILED ACCOUNT	TOTAL RETAIL NY JURIS PA JURIS													
			RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	STLT	GT			
364P	P - Primary Poles	DIST_CUST	3,405	0	3,405	0	0	0	0	0	3,405	0	0	0	0	0
		DIST_DEMAND	804	0	804	0	0	0	0	0	804	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	4,209	0	4,209	0	0	0	0	0	4,209	0	0	0	0	0
364S	P - Secondary Poles	DIST_CUST	89,884	0	89,884	78,003	37	6,136	5,084	91	0	48	439	46	0	0
		DIST_DEMAND	21,221	0	21,221	11,615	13	883	6,301	2,288	0	24	31	66	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	111,104	0	111,104	89,618	50	7,018	11,385	2,379	0	72	470	113	0	0
364Z	P - Streetlight Poles	DIST_CUST	4,930	0	4,930	0	0	0	0	0	0	0	0	4,930	0	0
		DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	4,930	0	4,930	0	0	0	0	0	0	0	0	0	4,930	0
365P	P - OH Prim. Conductors	DIST_CUST	22,689	0	22,689	0	0	0	0	0	22,689	0	0	0	0	0
		DIST_DEMAND	2,549	0	2,549	0	0	0	0	0	2,549	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	25,238	0	25,238	0	0	0	0	0	25,238	0	0	0	0	0
365S	P - OH Sec. Conductors	DIST_CUST	137,093	0	137,093	118,972	57	9,358	7,754	138	0	73	669	71	0	0
		DIST_DEMAND	15,402	0	15,402	8,430	10	641	4,573	1,661	0	17	23	48	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	152,495	0	152,495	127,402	66	9,999	12,327	1,799	0	91	692	119	0	0
366P	P - U Prim. Conduit	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	300	0	300	0	0	0	0	0	300	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	300	0	300	0	0	0	0	0	300	0	0	0	0	0
366S	P - U Sec. Conduit	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	7,399	0	7,399	4,050	5	308	2,197	798	0	8	11	23	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	7,399	0	7,399	4,050	5	308	2,197	798	0	8	11	23	0	0
367P	P - U Prim. Conductors	DIST_CUST	1,082	0	1,082	0	0	0	0	0	1,082	0	0	0	0	0
		DIST_DEMAND	196	0	196	0	0	0	0	0	196	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	1,278	0	1,278	0	0	0	0	0	1,278	0	0	0	0	0

**PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 PLANT IN SERVICE, \$1,000s**

ACCOUNT	DESCRIPTION	DETAILED ACCOUNT	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	STLT	GT
367S	P - U Sec. Conductors	DIST_CUST	59,052	0	59,052	51,247	24	4,031	3,340	60	0	32	288	30	0	0
		DIST_DEMAND	10,667	0	10,667	5,838	7	444	3,167	1,150	0	12	16	33	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	69,719	0	69,719	57,085	31	4,475	6,507	1,210	0	44	304	64	0	0
368	P - XFMRs	DIST_CUST	67,754	0	67,754	58,798	28	4,625	3,832	68	0	36	331	35	0	0
		DIST_DEMAND	44,981	0	44,981	24,620	28	1,871	13,355	4,850	0	51	66	141	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	112,735	0	112,735	83,418	56	6,496	17,187	4,918	0	87	397	176	0	0
369	P - Services	DIST_CUST	39,460	0	39,460	34,244	16	2,694	2,232	40	0	21	193	20	0	0
		DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	39,460	0	39,460	34,244	16	2,694	2,232	40	0	21	193	20	0	0
370	P - Meters	DIST_CUST	38,704	0	38,704	27,965	18	2,423	3,648	819	2,815	27	0	0	0	989
		DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	38,704	0	38,704	27,965	18	2,423	3,648	819	2,815	27	0	0	0	989
371	P - Customer Premises	DIST_CUST	3,793	0	3,793	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	3,793	0	3,793	0	0	0	0	0	0	0	0	0	0	0
372	P - Leased Property Cust. Prem.	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
373	P - Streetlight	DIST_CUST	12,359	0	12,359	0	0	0	0	0	0	0	0	0	12,359	0
		DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	12,359	0	12,359	0	0	0	0	0	0	0	0	0	12,359	0
	Dist Original Cost Plant	DIST_CUST	484,828	-	484,828	372,940	183	29,558	26,132	1,219	30,287	239	5,733	17,548	989	-
		DIST_DEMAND	163,373	-	163,373	84,729	96	6,440	45,962	16,690	8,569	175	228	484	-	-
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	648,201	0	648,201	457,669	279	35,998	72,094	17,910	38,855	414	5,961	18,032	989	-

PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 PLANT IN SERVICE, \$1,000s

ACCOUNT	DESCRIPTION	DETAILED ACCOUNT	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	STLT	GT
Transmission Plant																
350	P - Land (TRN)	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	0
352	P - Structures	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	960	0	960	483	1	37	262	95	76	1	1	1	3	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	960	0	960	483	1	37	262	95	76	1	1	1	3	0
353	P - Station Equipment	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	6,418	0	6,418	3,233	4	246	1,754	637	511	7	9	18	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	6,418	0	6,418	3,233	4	246	1,754	637	511	7	9	18	0	0
354	P - Towers And Fixtures	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	8	0	8	4	0	0	2	1	1	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	8	0	8	4	0	0	2	1	1	0	0	0	0	0
355	P - Poles And Fixtures	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	2,826	0	2,826	1,423	2	108	772	280	225	3	4	8	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	2,826	0	2,826	1,423	2	108	772	280	225	3	4	8	0	0
356	P - Overhd Conductr, Devices	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	2,722	0	2,722	1,371	2	104	744	270	217	3	4	8	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	2,722	0	2,722	1,371	2	104	744	270	217	3	4	8	0	0
357	P - Underground Conduit	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	65	0	65	33	0	2	18	6	5	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	65	0	65	33	0	2	18	6	5	0	0	0	0	0
358	P - Undergrmd Conductr, Devices	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	36	0	36	18	0	1	10	4	3	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	36	0	36	18	0	1	10	4	3	0	0	0	0	0

**PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 PLANT IN SERVICE, \$1,000s**

ACCOUNT	DESCRIPTION	DETAILED ACCOUNT	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
359	P - Roads And Trails	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	6	0	6	3	0	0	2	1	1	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	6	0	6	3	0	0	2	1	1	0	0	0	0
	Transm Original Cost Plant	DIST_CUST	-	-	-	-	-	-	-	-	-	-	-	-	-
		DIST_DEMAND	13,040	-	13,040	6,568	7	499	3,563	1,294	1,039	14	18	38	-
		DIST_ENERGY	-	-	-	-	-	-	-	-	-	-	-	-	-
		Total	13,040	0	13,040	6,568	7	499	3,563	1,294	1,039	14	18	38	0
General Plant															
389	P - Land	DIST_CUST	170	0	170	131	0	10	9	0	11	0	2	6	0
		DIST_DEMAND	57	0	57	30	0	2	16	6	3	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	227	0	227	160	0	13	25	6	14	0	2	6	0
390	P - Structures	DIST_CUST	4,633	0	4,633	3,564	2	282	250	12	289	2	55	168	9
		DIST_DEMAND	1,561	0	1,561	810	1	62	439	159	82	2	2	5	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	6,194	0	6,194	4,373	3	344	689	171	371	4	57	172	9
391	P - Office Equipment	DIST_CUST	4,490	0	4,490	3,454	2	274	242	11	281	2	53	163	9
		DIST_DEMAND	1,513	0	1,513	785	1	60	426	155	79	2	2	4	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	6,003	0	6,003	4,239	3	333	668	166	360	4	55	167	9
392	P - Transportation	DIST_CUST	445	0	445	342	0	27	24	1	28	0	5	16	1
		DIST_DEMAND	150	0	150	78	0	6	42	15	8	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	595	0	595	420	0	33	66	16	36	0	5	17	1
393	P - Stores Equipment	DIST_CUST	128	0	128	99	0	8	7	0	8	0	2	5	0
		DIST_DEMAND	43	0	43	22	0	2	12	4	2	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	172	0	172	121	0	10	19	5	10	0	2	5	0
394	P - Tools & Garage Equip.	DIST_CUST	1,820	0	1,820	1,400	1	111	98	5	114	1	22	66	4
		DIST_DEMAND	613	0	613	318	0	24	173	63	32	1	1	2	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	2,433	0	2,433	1,718	1	135	271	67	146	2	22	68	4

PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 PLANT IN SERVICE, \$1,000s

ACCOUNT	DESCRIPTION	DETAILED ACCOUNT	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
395	P - Laboratory	DIST_CUST	55	0	55	42	0	3	3	0	3	0	1	2	0
		DIST_DEMAND	18	0	18	10	0	1	5	2	1	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	73	0	73	52	0	4	8	2	4	0	1	2	0
396	P - Power Equipment	DIST_CUST	345	0	345	265	0	21	19	1	22	0	4	12	1
		DIST_DEMAND	116	0	116	60	0	5	33	12	6	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	461	0	461	326	0	26	51	13	28	0	4	13	1
397	P - Communication Equipment	DIST_CUST	1,872	0	1,872	1,440	1	114	101	5	117	1	22	68	4
		DIST_DEMAND	631	0	631	327	0	25	177	64	33	1	1	2	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	2,503	0	2,503	1,767	1	139	278	69	150	2	23	70	4
398	P - Misc. Equipment	DIST_CUST	48	0	48	37	0	3	3	0	3	0	1	2	0
		DIST_DEMAND	16	0	16	8	0	1	5	2	1	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	64	0	64	45	0	4	7	2	4	0	1	2	0
	Gen Original Cost Plant	DIST_CUST	14,005	0	14,005	10,773	5	854	755	35	875	7	166	507	29
		DIST_DEMAND	4,719	0	4,719	2,448	3	186	1,328	482	248	5	7	14	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	18,725	0	18,725	13,221	8	1,040	2,083	517	1,122	12	172	521	29
TOTAL PLANT IN SERVICE															
	Rate Base - Plant in Service	DIST_CUST	515,680	0	515,680	397,572	194	31,237	27,633	1,279	32,424	253	5,955	18,099	1,034
		DIST_DEMAND	183,260	0	183,260	94,793	107	7,205	51,422	18,673	10,067	196	256	542	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	698,940	0	698,940	492,365	301	38,442	79,055	19,952	42,491	448	6,211	18,641	1,034

PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 DEPRECIATION RESERVE, \$1,000s

ACCOUNT	DESCRIPTION	DETAILED ACCOUNT	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	STLT	GT
108_302	Intangible Plant AD - Franchise & Consents	DIST_CUST DIST_DEMAND DIST_ENERGY Total	1 0 0 1	0 0 0 0	1 0 0 1	0 0 0 1	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
108_303	AD - Intangible	DIST_CUST DIST_DEMAND DIST_ENERGY Total	11,059 1,387 0 12,447	0 0 0 0	11,059 1,387 0 12,447	9,100 683 0 9,783	4 1 0 4	541 52 0 593	490 371 0 860	16 135 0 151	829 139 0 968	4 1 0 6	37 2 0 39	28 4 0 32	11 4 0 11	0 0 0 0
	Rate Base - Intangible Plant Accumulated Depreciation Total	DIST_CUST DIST_DEMAND DIST_ENERGY Total	11,060 1,387 0 12,447	0 0 0 0	11,060 1,387 0 12,447	9,100 683 0 9,784	4 1 0 4	541 52 0 593	490 371 0 860	16 135 0 151	829 139 0 968	4 1 0 6	37 2 0 39	28 4 0 32	11 4 0 11	0 0 0 0
108_360	Distribution Plant AD - Land	DIST_CUST DIST_DEMAND DIST_ENERGY Total	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
108_361	AD - Structures	DIST_CUST DIST_DEMAND DIST_ENERGY Total	0 748 0 748	0 0 0 0	0 748 0 748	0 377 0 377	0 0 0 0	0 29 0 29	0 204 0 204	0 74 0 74	0 60 0 60	0 1 0 1	0 1 0 1	0 2 0 2	0 0 0 0	0 0 0 0
108_362	AD - Station	DIST_CUST DIST_DEMAND DIST_ENERGY Total	0 13,607 0 13,607	0 0 0 0	0 13,607 0 13,607	0 6,854 0 6,854	0 8 0 8	0 521 0 521	0 3,718 0 3,718	0 1,350 0 1,350	0 1,084 0 1,084	0 14 0 14	0 18 0 18	0 39 0 39	0 0 0 0	0 0 0 0
108_364	AD - Poles	DIST_CUST DIST_DEMAND DIST_ENERGY Total	28,135 6,643 0 34,778	0 0 0 0	28,135 6,643 0 34,778	22,344 3,503 0 25,847	11 4 0 15	1,758 266 0 2,024	1,456 1,900 0 3,357	26 690 0 716	975 242 0 1,218	14 7 0 21	126 9 0 135	1,426 20 0 1,446	0 0 0 0	0 0 0 0
108_365	AD - Conductors	DIST_CUST DIST_DEMAND DIST_ENERGY Total	27,203 3,056 0 30,259	0 0 0 0	27,203 3,056 0 30,259	20,255 1,435 0 21,690	10 2 0 11	1,593 109 0 1,702	1,320 779 0 2,099	24 283 0 306	3,863 434 0 4,297	12 3 0 15	114 4 0 118	12 8 0 20	0 0 0 0	0 0 0 0
108_366	AD - Underground Conduit	DIST_CUST DIST_DEMAND DIST_ENERGY Total	0 2,487 0 2,487	0 0 0 0	0 2,487 0 2,487	0 1,308 0 1,308	0 1 0 1	0 99 0 99	0 710 0 710	0 258 0 258	0 97 0 97	0 3 0 3	0 4 0 4	0 7 0 7	0 0 0 0	0 0 0 0

Depreciation Reserve

**PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 DEPRECIATION RESERVE, \$1,000s**

Penn Power Exhibit TJD-1
 Witness: T. J. Dolcjal
 Section 1, Page 9

ACCOUNT	DESCRIPTION	ACCOUNT	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
108_367	AD - Underground Conductors	TOTAL RETAIL	18,357	0	15,644	7	1,230	1,020	18	330	10	88	9	0
		DIST_CUST	3,316	0	1,782	2	135	967	351	60	4	5	10	0
		DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0
		Total	21,673	0	17,426	9	1,366	1,986	369	390	13	93	19	0
108_368	AD - XFMRs	DIST_CUST	20,535	0	17,821	9	1,402	1,161	21	0	11	100	11	0
		DIST_DEMAND	13,633	0	7,462	8	567	4,048	1,470	0	15	20	43	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0
		Total	34,168	0	25,282	17	1,969	5,209	1,491	0	26	120	53	0
108_369	AD - Services	DIST_CUST	19,923	0	17,290	8	1,360	1,127	20	0	11	97	10	0
		DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0
		Total	19,923	0	17,290	8	1,360	1,127	20	0	11	97	10	0
108_370	AD - Meters	DIST_CUST	5,566	0	4,022	3	348	525	118	405	4	0	0	142
		DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0
		Total	5,566	0	4,022	3	348	525	118	405	4	0	0	142
108_371	AD - Customer Premises	DIST_CUST	2,582	0	2,582	0	0	0	0	0	0	2,582	0	0
		DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0
		Total	2,582	0	2,582	0	0	0	0	0	0	2,582	0	0
108_372	AD - Leased Property Cust. Prem.	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0
		Total	0	0	0	0	0	0	0	0	0	0	0	0
108_373	AD - Streetlights	DIST_CUST	4,333	0	4,333	0	0	0	0	0	0	0	4,333	0
		DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0
		Total	4,333	0	4,333	0	0	0	0	0	0	0	4,333	0
RWIP_Dist	Retirement Work in Progress - Distribution	DIST_CUST	15	0	12	0	1	1	0	1	0	0	1	0
		DIST_DEMAND	5	0	3	0	0	1	1	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0
		Total	20	0	14	0	1	2	1	1	0	0	1	0
		DIST_CUST	126,649	0	97,387	47	7,692	6,610	226	5,574	61	3,107	5,802	142
		DIST_DEMAND	43,495	0	22,724	26	1,727	12,327	4,476	1,977	47	61	130	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0
		Total	170,145	0	120,111	73	9,420	18,937	4,703	7,551	108	3,168	5,932	142

PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 DEPRECIATION RESERVE, \$1,000s

Penn Power Exhibit TD-1
 Witness: T. J. Dolezal
 Section 1, Page 10

ACCOUNT	DESCRIPTION	DETAILED ACCOUNT	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
108_350	Transmission Plant AD - Land (TRN)	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	0	0	0	0	0	0	0	0	0	0	0	0	0
108_352	AD - Structures	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	638	0	638	321	0	24	174	63	51	1	1	2	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	638	0	638	321	0	24	174	63	51	1	1	2	0
108_353	AD - Station Equipment	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	4,787	0	4,787	2,411	3	183	1,308	475	381	5	7	14	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	4,787	0	4,787	2,411	3	183	1,308	475	381	5	7	14	0
108_354	AD - Towers And Fixtures	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	8	0	8	4	0	0	2	1	1	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	8	0	8	4	0	0	2	1	1	0	0	0	0
108_355	AD - Poles And Fixtures	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	915	0	915	461	1	35	250	91	73	1	1	3	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	915	0	915	461	1	35	250	91	73	1	1	3	0
108_356	AD - Overhd Conductr, Devices	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	965	0	965	486	1	37	264	96	77	1	1	3	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	965	0	965	486	1	37	264	96	77	1	1	3	0
108_357	AD - Underground Conduit	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	56	0	56	28	0	2	15	6	4	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	56	0	56	28	0	2	15	6	4	0	0	0	0
108_358	AD - Undergrnd Conductr, Devices	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	30	0	30	15	0	1	8	3	2	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	30	0	30	15	0	1	8	3	2	0	0	0	0
108_359	AD - Roads And Trails	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	5	0	5	3	0	0	1	1	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	5	0	5	3	0	0	1	1	0	0	0	0	0

Depreciation Reserve

PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 DEPRECIATION RESERVE, \$1,000s

ACCOUNT	DESCRIPTION	Detailed Account	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
108_389	AD - Land	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	0	0	0	0	0	0	0	0	0	0	0	0	0
108_390	AD - Structures	DIST_CUST	2,223	0	2,223	1,710	1	136	120	6	139	1	26	80	5
		DIST_DEMAND	749	0	749	388	0	30	211	77	39	1	1	2	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	2,972	0	2,972	2,098	1	165	331	82	178	2	27	83	5
108_391	AD - Office Equipment	DIST_CUST	3,219	0	3,219	2,476	1	196	174	8	201	2	38	117	7
		DIST_DEMAND	1,085	0	1,085	563	1	43	305	111	57	1	2	3	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	4,304	0	4,304	3,039	2	239	479	119	258	3	40	120	7
108_392	AD - Transportation	DIST_CUST	126	0	126	97	0	8	7	0	8	0	1	5	0
		DIST_DEMAND	43	0	43	22	0	2	12	4	2	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	169	0	169	119	0	9	19	5	10	0	2	5	0
108_393	AD - Stores Equip.	DIST_CUST	98	0	98	75	0	6	5	0	6	0	1	4	0
		DIST_DEMAND	33	0	33	17	0	1	9	3	2	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	131	0	131	92	0	7	15	4	8	0	1	4	0
108_394	AD - Tools & Garage Equip.	DIST_CUST	973	0	973	749	0	59	52	2	61	0	12	35	2
		DIST_DEMAND	328	0	328	170	0	13	92	34	17	0	0	1	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	1,301	0	1,301	919	1	72	145	36	78	1	12	36	2
108_395	AD - Laboratory	DIST_CUST	49	0	49	38	0	3	3	0	3	0	1	2	0
		DIST_DEMAND	17	0	17	9	0	1	5	2	1	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	66	0	66	46	0	4	7	2	4	0	1	2	0

Depreciation Reserve

PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 DEPRECIATION RESERVE, \$1,000s

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ACCOUNT	DESCRIPTION	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
108_396	AD - Power Equipment	176	0	176	136	0	11	10	0	11	0	2	6	0
		59	0	59	31	0	2	17	6	3	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	236	0	236	166	0	13	26	7	14	0	2	7	0
108_397	AD - Communication Equip.	457	0	457	352	0	28	25	1	29	0	5	17	1
		154	0	154	80	0	6	43	16	8	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	611	0	611	432	0	34	68	17	37	0	6	17	1
108_398	AD - Misc. Equipment	58	0	58	45	0	4	3	0	4	0	1	2	0
		20	0	20	10	0	1	5	2	1	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	78	0	78	55	0	4	9	2	5	0	1	2	0
RWIP_Gen	Retirement Work in Progress - General	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0

Rate Base Total Accumulated Depreciation General Plant

DIST_CUST	7,380	0	7,380	5,677	3	450	398	19	461	4	87	267	15
DIST_DEMAND	2,487	0	2,487	1,290	1	98	700	254	130	3	3	7	0
DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	9,867	0	9,867	6,967	4	548	1,097	273	591	6	91	274	15

TOTAL PLANT ACCUMULATED DEPRECIATION

DIST_CUST	145,089	0	145,089	112,165	53	8,683	7,497	261	6,865	69	3,231	6,097	168
DIST_DEMAND	54,772	0	54,772	28,426	32	2,161	15,420	5,600	2,836	59	77	163	0
DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	199,862	0	199,862	140,591	86	10,844	22,917	5,860	9,700	128	3,308	6,259	168

Rate Base Total Accumulated Depreciation

Depreciation Reserve

PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 RATE BASE ADJUSTMENTS, \$1,000s

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ACCOUNT	DESCRIPTION	DETAILED ACCOUNT	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
RATE BASE ADDITIONS															
ADJ_RB_CWC	Cash Working Capital	DIST_CUST	21,621	0	21,621	16,631	8	1,318	1,165	54	1,351	11	256	783	44
		DIST_DEMAND	7,285	0	7,285	3,778	4	287	2,050	744	382	8	10	22	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	28,906	0	28,906	20,409	12	1,605	3,215	799	1,733	18	266	804	44
ADJ_RB_M&S	RB Adj. M&S	DIST_CUST	2,427	0	2,427	1,867	1	148	131	6	152	1	29	88	5
		DIST_DEMAND	818	0	818	424	0	32	230	84	43	1	1	2	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	3,245	0	3,245	2,291	1	180	361	90	195	2	30	90	5
ADJ_RB_Storm_No RB Adj.	Storm Damage Normalization	DIST_CUST	1,066	0	1,066	820	0	65	57	3	67	1	13	39	2
		DIST_DEMAND	359	0	359	186	0	14	101	37	19	0	1	1	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	1,425	0	1,425	1,006	1	79	158	39	85	1	13	40	2
ADJ_RB_Legacy_M RB Adj.	Adjustment for Retired Legacy Meters	DIST_CUST	5,508	0	5,508	3,980	3	345	519	116	401	4	0	0	141
		DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	5,508	0	5,508	3,980	3	345	519	116	401	4	0	0	141
Rate Base Additions															
		DIST_CUST	30,621	0	30,621	23,297	12	1,876	1,873	180	1,969	16	297	909	192
		DIST_DEMAND	8,462	0	8,462	4,389	5	334	2,381	865	444	9	12	25	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	39,084	0	39,084	27,686	17	2,210	4,253	1,044	2,413	25	309	934	192
RATE BASE SUBTRACTIONS															
235	Customer Deposits	DIST_CUST	5,239	0	5,239	2,789	3	243	1,689	181	125	6	1	0	202
		DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	5,239	0	5,239	2,789	3	243	1,689	181	125	6	1	0	202
252	Customer Advances	DIST_CUST	33	0	33	33	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	33	0	33	33	0	0	0	0	0	0	0	0	0
RB_DIT_LIB	Deferred Tax - Liberalized Depreciation	DIST_CUST	88,350	0	88,350	67,960	33	5,386	4,762	222	5,519	44	1,045	3,198	180
		DIST_DEMAND	29,771	0	29,771	15,440	17	1,174	8,376	3,041	1,561	32	42	88	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	118,121	0	118,121	83,400	51	6,560	13,138	3,264	7,081	75	1,086	3,286	180

Rate Base Adjustments

PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 RATE BASE ADJUSTMENTS, \$1,000s

ACCOUNT	DESCRIPTION	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
TOTAL RETAIL		935	0	935	0	57	50	2	58	0	11	34	2
DIST_CUST	Operating Reserves	315	0	315	0	12	89	32	17	0	0	0	0
DIST_DEMAND		0	0	0	0	0	0	0	0	0	0	0	0
DIST_ENERGY		0	0	0	0	0	0	0	0	0	0	0	0
Total		1,250	0	1,250	883	69	139	35	75	1	11	35	2
DIST_CUST		94,557	-	94,557	71,502	37	5,687	405	5,703	50	1,056	3,232	384
DIST_DEMAND		30,086	0	30,086	15,603	18	1,186	3,074	1,578	32	42	89	0
DIST_ENERGY		0	0	0	0	0	0	0	0	0	0	0	0
Total		124,643	0	124,643	87,106	54	6,873	3,479	7,281	82	1,098	3,321	384
TOTAL RATE BASE ADJUSTMENTS													
Rate Base Total													
DIST_CUST		306,655	0	306,655	237,203	115	18,743	15,508	793	21,827	150	1,964	9,680
DIST_DEMAND		106,864	0	106,864	55,152	62	4,192	29,918	10,864	6,097	114	149	315
DIST_ENERGY		0	0	0	0	0	0	0	0	0	0	0	0
Total		413,519	0	413,519	292,355	178	22,935	45,426	11,657	27,923	264	2,113	9,995
673													

PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 REVENUE, \$1,000s

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ACCOUNT	DESCRIPTION	DETAILED ACCOUNT	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	STLT	GT
Tariff Revenue																
400_D	Distribution Revenue w/o USR	DIST_CUST	71,689	0	71,689	58,686	42	3,334	4,462	360	2,323	48	368	719	1,347	
		DIST_DEMAND	19,305	0	19,305	9,113	18	497	6,041	3,263	298	29	19	28	0	
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Total	90,994	0	90,994	67,799	61	3,830	10,502	3,623	2,621	76	388	747	1,347	
Tariff Revenue Total																
		DIST_CUST	71,689	0	71,689	58,686	42	3,334	4,462	360	2,323	48	368	719	1,347	
		DIST_DEMAND	19,305	0	19,305	9,113	18	497	6,041	3,263	298	29	19	28	0	
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Total	90,994	0	90,994	67,799	61	3,830	10,502	3,623	2,621	76	388	747	1,347	
Other Revenues																
450	OR - Forefeited Discount Revenue	DIST_CUST	1,291	0	1,291	1,119	1	88	73	1	1	1	6	1	0	
		DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0	
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Total	1,291	0	1,291	1,119	1	88	73	1	1	1	6	1	0	
451	OR - Misc. Service Revenues	DIST_CUST	194	0	194	169	0	13	11	0	0	0	0	1	0	
		DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0	
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Total	194	0	194	169	0	13	11	0	0	0	0	1	0	
454POLE	OR - Pole Rent	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0	
		DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0	
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Total	0	0	0	0	0	0	0	0	0	0	0	0	0	
454RENT	OR - Lease Rent	DIST_CUST	1,441	0	1,441	1,164	1	81	70	3	109	1	5	5	2	
		DIST_DEMAND	195	0	195	97	0	7	52	19	19	0	0	1	0	
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Total	1,636	0	1,636	1,261	1	89	123	22	128	1	6	6	2	
456MISC	OR - Misc. Revenue	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0	
		DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0	
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Total	0	0	0	0	0	0	0	0	0	0	0	0	0	
456AECNITS	OR - AEC wheeling NITS	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0	
		DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0	
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Total	0	0	0	0	0	0	0	0	0	0	0	0	0	

**PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 REVENUE, \$1,000s**

ACCOUNT	DESCRIPTION	DETAILED ACCOUNT	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
456SCRAP	OR - NUG/TMI	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	0	0	0	0	0	0	0	0	0	0	0	0	0
ADJ_IS_Late_PayIS Adj.	Late Payment Charge	DIST_CUST	74	0	74	64	0	5	4	0	0	0	0	0	0
		DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	74	0	74	64	0	5	4	0	0	0	0	0	0
	Other Revenue Total	DIST_CUST	3,000	0	3,000	2,516	1	188	158	4	110	2	13	6	2
		DIST_DEMAND	195	0	195	97	0	7	52	19	19	0	0	1	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	3,196	0	3,196	2,613	1	195	211	23	129	2	13	7	2
TOTAL REVENUE															
	Retail Total Revenue	DIST_CUST	74,689	0	74,689	61,203	44	3,521	4,620	364	2,433	49	381	725	1,349
		DIST_DEMAND	19,500	0	19,500	9,209	19	504	6,093	3,282	316	29	20	29	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	94,190	0	94,190	70,412	62	4,025	10,713	3,646	2,749	78	401	754	1,349
Late Payment Change Adjustment															
450_Adj	OR - Forefeited Discount Revenue Adjust	DIST_CUST	119	0	119	103	0	8	7	0	0	0	0	1	0
		DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	119	0	119	103	0	8	7	0	0	0	0	1	0

PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 O & M EXPENSES, \$1,000s

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ACCOUNT	DESCRIPTION	DETAILED ACCOUNT	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
560	OP - Operation supervision and engineering	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	2	0	2	1	0	0	0	0	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	2	0	2	1	0	0	0	0	0	0	0	0	0
561	OP - Load Dispatch	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	7	0	7	4	0	0	2	1	1	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	7	0	7	4	0	0	2	1	1	0	0	0	0
565	OP - Transmission of electricity by others	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	0	0	0	0	0	0	0	0	0	0	0	0	0
566	OP - Miscellaneous transmission expenses	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	73	0	73	37	0	3	20	7	6	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	73	0	73	37	0	3	20	7	6	0	0	0	0
568	MN - Maintenance supervision and engineering	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	21	0	21	11	0	1	6	2	2	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	21	0	21	11	0	1	6	2	2	0	0	0	0
569	MN - Maintenance of structures	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	14	0	14	7	0	1	4	1	1	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	14	0	14	7	0	1	4	1	1	0	0	0	0
570	MN - Maintenance of station equipment	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	3	0	3	2	0	0	1	0	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	3	0	3	2	0	0	1	0	0	0	0	0	0

PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 O & M EXPENSES, \$1,000s

ACCOUNT	DESCRIPTION	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
571	MN - Maintenance of overhead lines													
		0	0	0	0	0	0	0	0	0	0	0	0	0
		(174)	(174)	(88)	(88)	(7)	(17)	(14)	(0)	(0)	(0)	(0)	(1)	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		(174)	(174)	(88)	(88)	(7)	(17)	(14)	(0)	(0)	(0)	(0)	(1)	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
573	MN - Maintenance of miscellaneous transmission													
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
575	Operation-regional market expense													
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
580	OP - Supv. & Engineering													
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
581	OP - Dispatching													
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
583	OP - Overhead Line													
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
584	#N/A													
		451	451	385	30	25	8	0	0	0	0	0	0	0
		82	82	44	3	24	9	1	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		533	533	428	34	49	10	0	0	0	0	0	0	0
586	OP - Meter													
		60	60	43	4	6	1	4	0	0	0	0	0	2
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		60	60	43	4	6	1	4	0	0	0	0	0	2

PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 O & M EXPENSES, \$1,000s

Penn Power Exhibit TJD-1
 Witness: T. J. Dolalez
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ACCOUNT	DESCRIPTION	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
588	OP - Misc. Expenses													
		851	0	851	655	0	52	46	2	53	0	10	31	2
		287	0	287	149	0	11	81	29	15	0	0	1	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	1,138	0	1,138	804	0	63	127	31	68	1	10	32	2
589	#N/A													
		239	0	239	184	0	15	13	1	16	0	2	8	1
		80	0	80	41	0	3	22	8	4	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	319	0	319	225	0	18	35	9	21	0	2	8	1
590	MN - Supv. & Engineering													
		69	0	69	51	0	4	3	0	10	0	0	0	0
		14	0	14	7	0	1	4	1	2	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	83	0	83	58	0	5	7	1	11	0	0	0	0
591	MN - Structures													
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
592	MN - Station													
		0	0	0	0	0	0	0	0	0	0	0	0	0
		1,101	0	1,101	554	1	42	301	109	88	1	1	3	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	1,101	0	1,101	554	1	42	301	109	88	1	1	3	0
593	MN - OH Conductors													
		11,301	0	11,301	8,414	4	662	548	10	1,605	5	47	5	0
		1,270	0	1,270	596	1	45	323	117	180	1	2	3	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	12,570	0	12,570	9,011	5	707	872	127	1,785	6	49	8	0
594	#N/A													
		40	0	40	34	0	3	2	0	1	0	0	0	0
		7	0	7	4	0	0	2	1	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	48	0	48	38	0	3	4	1	1	0	0	0	0

PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 O & M EXPENSES, \$1,000s

ACCOUNT	DESCRIPTION	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
595	MN - XFMRs	29	0	29	26	0	2	2	0	0	0	0	0	0
	DIST_CUST	20	0	20	11	0	1	6	2	0	0	0	0	0
	DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	49	0	49	36	0	3	7	2	0	0	0	0	0
596	MN - Streetlights	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
597	MN - Meters	258	0	258	186	0	16	24	5	19	0	0	0	7
	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	258	0	258	186	0	16	24	5	19	0	0	0	7
598	#N/A	57	0	57	44	0	3	3	0	4	0	1	2	0
	DIST_CUST	19	0	19	10	0	1	5	2	1	0	0	0	0
	DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	76	0	76	54	0	4	8	2	5	0	1	2	0
ADJ_IS_Dist_IS Adj. Distribution Payroll		184	0	184	138	0	11	10	0	23	0	1	1	0
	DIST_CUST	41	0	41	20	0	2	11	4	4	0	0	0	0
	DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	225	0	225	158	0	12	21	4	27	0	1	1	0
ADJ_IS_Reqd IS Adj. Distribution Reaquired Debt		274	0	274	211	0	17	15	1	17	0	3	10	1
	DIST_CUST	92	0	92	48	0	4	26	9	5	0	0	0	0
	DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	366	0	366	259	0	20	41	10	22	0	3	10	1
IS_BTL	Balancing Transmission Losses in PTC	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0

PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 O & M EXPENSES, \$1,000s

ACCOUNT	DESCRIPTION	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT	
	DETAILED ACCOUNT														
	DIST_CUST	13,814	0	13,814	10,371	5	818	697	21	1,759	6	67	57	11	
	DIST_DEMAND	2,958	0	2,958	1,457	2	111	790	287	296	3	4	8	0	
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Total	16,772	0	16,772	11,828	7	929	1,488	308	2,056	10	71	65	11	
Customer Accounts															
902	Customer Account Supervision	1,244	0	1,244	1,009	1	125	103	3	2	1	0	0	1	
	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0	
	DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0	
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Total	1,244	0	1,244	1,009	1	125	103	3	2	1	0	0	1	
903	Customer Account Collections	1,509	0	1,509	1,308	1	103	85	2	1	1	7	1	0	
	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0	
	DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0	
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Total	1,509	0	1,509	1,308	1	103	85	2	1	1	7	1	0	
904	Customer Account Uncollectibles	1,220	0	1,220	1,156	0	32	31	0	0	0	0	0	1	
	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0	
	DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0	
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Total	1,220	0	1,220	1,156	0	32	31	0	0	0	0	0	1	
905	Customer Account Accounts	473	0	473	410	0	32	27	0	0	0	2	0	0	
	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0	
	DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0	
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Total	473	0	473	410	0	32	27	0	0	0	2	0	0	
ADJ_IS_Cust_IS Adj.	Customer Accounts Payroll	82	0	82	69	0	7	6	0	0	0	0	0	0	
	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0	
	DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0	
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Total	82	0	82	69	0	7	6	0	0	0	0	0	0	
ADJ_IS_Cust_IS Adj.	Customer Accounts Deposits	231	0	231	123	0	11	74	8	6	0	0	0	9	
	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0	
	DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0	
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Total	231	0	231	123	0	11	74	8	6	0	0	0	9	

PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
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 COMPANY PREFERRED ALLOCATION METHOD
 O & M EXPENSES, \$1,000s

ACCOUNT	DESCRIPTION	ADJ_IS_5c	IS Adj.	Customer Accounts Uncollectables	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT	
DETAILED ACCOUNT																		
DIST_CUST		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIST_DEMAND		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIST_ENERGY		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ADJ_IS_Numt IS Adj. Customer Accounts No. of Cust.																		
DIST_CUST		2	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0
DIST_DEMAND		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIST_ENERGY		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		2	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Customer Account Expense																		
DIST_CUST		4,762	0	4,762	4,077	2	310	326	13	9	3	10	1	11				
DIST_DEMAND		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIST_ENERGY		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		4,762	0	4,762	4,077	2	310	326	13	9	3	10	1	11				
Customer Information																		
Customer Info Supervision																		
907		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIST_CUST		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIST_DEMAND		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIST_ENERGY		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Customer Info Assistance Dist.																		
908		3,413	0	3,413	3,413	0	0	0	0	0	0	0	0	0	0	0	0	0
DIST_CUST		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIST_DEMAND		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIST_ENERGY		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		3,413	0	3,413	3,413	0	0	0	0	0	0	0	0	0	0	0	0	0
Customer Info Advertising Dist.																		
909		129	0	129	112	0	9	7	0	0	0	0	0	0	0	0	0	0
DIST_CUST		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIST_DEMAND		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIST_ENERGY		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		129	0	129	112	0	9	7	0	0	0	0	0	0	0	0	0	0
Customer Info Misc. Expense																		
910		1,403	0	1,403	1,374	1	14	12	0	0	0	0	0	0	0	0	0	0
DIST_CUST		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIST_DEMAND		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIST_ENERGY		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		1,403	0	1,403	1,374	1	14	12	0	0	0	0	0	0	0	0	0	0

PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 O & M EXPENSES, \$1,000s

ACCOUNT	DESCRIPTION	ADJ_IS_Cust_IS Adj. Customer Service Payroll	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
DETAILED ACCOUNT															
	DIST_CUST		38	0	38	37	0	0	0	0	0	0	0	0	0
	DIST_DEMAND		0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total		38	0	38	37	0	0	0	0	0	0	0	0	0
Total Customer Service and Info Expense															
	DIST_CUST		4,984	0	4,984	4,937	1	23	19	0	0	0	0	2	0
	DIST_DEMAND		0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total		4,984	0	4,984	4,937	1	23	19	0	0	0	0	2	0
Sales															
911	Sales Supervision		18	0	18	15	0	1	1	0	0	0	0	0	0
	DIST_CUST		0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_DEMAND		0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total		18	0	18	15	0	1	1	0	0	0	0	0	0
913	#N/A		7	0	7	6	0	0	0	0	0	0	0	0	0
	DIST_CUST		0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_DEMAND		0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total		7	0	7	6	0	0	0	0	0	0	0	0	0
Total Sales Expense															
	DIST_CUST		25	0	25	21	0	2	1	0	0	0	0	0	0
	DIST_DEMAND		0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total		25	0	25	21	0	2	1	0	0	0	0	0	0
Administrative and General															
920	A&G Salaries		(192)	0	(192)	(155)	(0)	(11)	(9)	(0)	(15)	(0)	(1)	(1)	(0)
	DIST_CUST		(26)	0	(26)	(13)	(0)	(1)	(7)	(3)	(2)	(0)	(0)	(0)	0
	DIST_DEMAND		0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total		(218)	0	(218)	(168)	(0)	(12)	(16)	(3)	(17)	(0)	(1)	(1)	(0)
921	A&G Office Supplies		912	0	912	737	0	51	44	2	69	0	3	3	1
	DIST_CUST		122	0	122	60	0	5	33	12	12	0	0	0	0
	DIST_DEMAND		0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total		1,034	0	1,034	797	0	56	77	14	81	1	3	4	1
922	A&G Admin. Expenses		0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_CUST		0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_DEMAND		0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total		0	0	0	0	0	0	0	0	0	0	0	0	0

PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
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 COMPANY PREFERRED ALLOCATION METHOD
 O & M EXPENSES, \$1,000s

Penn Power Exhibit TID-1
 Witness: T. J. Dolezal
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ACCOUNT	DESCRIPTION	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
923	A&G Outside Services	3,231	0	3,231	2,611	1	182	157	6	245	2	12	11	4
		433	0	433	214	0	16	116	42	42	0	1	1	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	3,664	0	3,664	2,825	2	198	273	48	286	2	12	13	4
924	A&G Property Insurance	22	0	22	17	0	1	1	0	1	0	0	1	0
		7	0	7	4	0	0	2	1	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	29	0	29	21	0	2	3	1	2	0	0	1	0
925	A&G Injury and Damages	256	0	256	191	0	15	13	1	32	0	1	1	1
		56	0	56	28	0	2	15	5	5	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	312	0	312	219	0	17	29	6	37	0	1	2	1
926	A&G Pension and Benefits	880	0	880	711	0	50	43	2	67	0	3	3	1
		118	0	118	58	0	4	32	11	11	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	998	0	998	770	0	54	74	13	78	1	3	3	1
928	Regulatory Commission Expense	655	0	655	529	0	37	32	1	50	0	2	2	1
		88	0	88	43	0	3	24	9	8	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	742	0	742	572	0	40	55	10	58	0	2	3	1
930_1	A&G General Advertising	48	0	48	39	0	3	2	0	4	0	0	0	0
		6	0	6	3	0	0	2	1	1	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	55	0	55	42	0	3	4	1	4	0	0	0	0
930_2	A&G Misc. Expense	183	0	183	148	0	10	9	0	14	0	1	1	0
		24	0	24	12	0	1	7	2	2	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	207	0	207	160	0	11	15	3	16	0	1	1	0

PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 O & M EXPENSES, \$1,000s

ACCOUNT	DESCRIPTION	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
931	A&G Misc. Rent	15	0	15	12	0	1	1	0	1	0	0	0	0
		2	0	2	1	0	0	1	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	17	0	17	13	0	1	1	0	1	0	0	0	0
935	A&G Maint. Of General Plant	334	0	334	257	0	20	18	1	21	0	4	12	1
		112	0	112	58	0	4	32	11	6	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	446	0	446	315	0	25	50	12	27	0	4	12	1
ADJ_IS_Cash_IS Adj. Cash Pension		1,572	0	1,572	1,271	1	89	76	3	119	1	6	5	2
		211	0	211	104	0	8	56	21	20	0	0	1	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	1,783	0	1,783	1,375	1	97	133	23	139	1	6	6	2
ADJ_IS_Emp_IS Adj. Other Employee Benefit Costs		981	0	981	793	0	55	48	2	74	0	4	3	1
		131	0	131	65	0	5	35	13	13	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	1,113	0	1,113	858	0	60	83	15	87	1	4	4	1
ADJ_IS_Non-IS Adj. A&G Non-Juris. Expense		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
ADJ_IS_Rate_IS Adj. A&G Rate Case Expense		71	0	71	58	0	4	3	0	5	0	0	0	0
		10	0	10	5	0	0	3	1	1	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	81	0	81	62	0	4	6	1	6	0	0	0	0
ADJ_IS_7e IS Adj. A&G Legacy Meters		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0

PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 O & M EXPENSES, \$1,000s

ACCOUNT	DESCRIPTION	ADJ_IS_7I	IS Adj. Accelerated Switching	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
DETAILED ACCOUNT																
DIST_CUST				0	0	0	0	0	0	0	0	0	0	0	0	0
DIST_DEMAND				0	0	0	0	0	0	0	0	0	0	0	0	0
DIST_ENERGY				0	0	0	0	0	0	0	0	0	0	0	0	0
Total				0	0	0	0	0	0	0	0	0	0	0	0	0
Total A & G Expense				8,968	0	8,968	7,219	4	508	439	17	687	4	36	44	12
DIST_CUST				1,295	0	1,295	643	1	49	349	127	120	1	2	4	0
DIST_DEMAND				0	0	0	0	0	0	0	0	0	0	0	0	0
DIST_ENERGY				0	0	0	0	0	0	0	0	0	0	0	0	0
Total				10,264	0	10,264	7,862	4	557	788	144	806	6	37	47	12
Total O & M Expense				32,553	0	32,553	26,625	11	1,662	1,483	52	2,455	13	115	103	35
DIST_CUST				4,254	0	4,254	2,100	2	160	1,139	414	416	4	6	12	0
DIST_DEMAND				0	0	0	0	0	0	0	0	0	0	0	0	0
DIST_ENERGY				0	0	0	0	0	0	0	0	0	0	0	0	0
Total				36,806	0	36,806	28,725	13	1,821	2,622	465	2,871	18	120	115	35
Total A & G Expense Less Adjustments				6,343	0	6,343	5,097	3	360	311	12	488	3	26	34	9
DIST_CUST				944	0	944	470	1	36	255	92	86	1	1	3	0
DIST_DEMAND				0	0	0	0	0	0	0	0	0	0	0	0	0
DIST_ENERGY				0	0	0	0	0	0	0	0	0	0	0	0	0
Total				7,287	0	7,287	5,567	3	396	566	105	574	4	27	37	9
EXP less A&G				23,584	-	23,584	19,406	7	1,154	1,044	34	1,768	9	79	60	23
DIST_CUST				2,958	-	2,958	1,457	2	111	790	287	296	3	4	8	-
DIST_DEMAND				-	-	-	-	-	-	-	-	-	-	-	-	-
DIST_ENERGY				-	-	-	-	-	-	-	-	-	-	-	-	-
Total				26,543	-	26,543	20,863	9	1,264	1,834	321	2,064	12	83	68	23
Depreciation less A & G				19,825	-	19,825	14,986	8	1,216	1,207	114	1,284	10	191	688	121
DIST_CUST				6,261	-	6,261	3,246	4	247	1,761	640	330	7	9	19	-
DIST_DEMAND				-	-	-	-	-	-	-	-	-	-	-	-	-
DIST_ENERGY				-	-	-	-	-	-	-	-	-	-	-	-	-
Total				26,087	-	26,087	18,232	11	1,463	2,968	753	1,614	17	199	707	121
Total Expense less A&G				43,410	-	43,410	34,391	15	2,370	2,251	148	3,052	20	270	748	144
DIST_CUST				9,220	-	9,220	4,704	5	358	2,552	927	626	10	13	27	-
DIST_DEMAND				-	-	-	-	-	-	-	-	-	-	-	-	-
DIST_ENERGY				-	-	-	-	-	-	-	-	-	-	-	-	-
Total				52,629	-	52,629	39,095	21	2,727	4,803	1,075	3,678	29	282	775	144

PENNSYLVANIA POWER COMPANY
COST OF SERVICE STUDY - TOTAL SUMMARY
FULLY FUTURE TEST YEAR
COMPANY PREFERRED ALLOCATION METHOD
DEPRECIATION & AMORTIZATION, \$1,000s

ACCOUNT	DESCRIPTION	DETAILED ACCOUNT	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT	
403_303	DE - Intangible	DIST_CUST DIST_DEMAND DIST_ENERGY Total	(674) (85) 0 (758)	0 0 0 0	(674) (85) 0 (758)	(554) (42) 0 (596)	(0) (0) 0 (0)	(33) (3) 0 (36)	(30) (23) 0 (52)	(1) (8) 0 (9)	(51) (8) 0 (59)	(0) (0) 0 (0)	(2) (0) 0 (2)	(2) (0) 0 (1)	(1) 0 0 (1)	
403_350	DE - Land (TRN)	DIST_CUST DIST_DEMAND DIST_ENERGY Total	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	
403_352	DE - Structures	DIST_CUST DIST_DEMAND DIST_ENERGY Total	0 9 0 9	0 0 0 0	0 9 0 9	0 4 0 4	0 0 0 0	0 0 0 0	0 2 0 2	0 1 0 1	0 1 0 1	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
403_353	DE - Station Equipment	DIST_CUST DIST_DEMAND DIST_ENERGY Total	0 51 0 51	0 0 0 0	0 51 0 51	0 26 0 26	0 2 0 2	0 14 0 14	0 5 0 5	0 4 0 4	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
403_354	DE - Towers And Fixtures	DIST_CUST DIST_DEMAND DIST_ENERGY Total	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
403_355	DE - Poles And Fixtures	DIST_CUST DIST_DEMAND DIST_ENERGY Total	0 50 0 50	0 0 0 0	0 50 0 50	0 25 0 25	0 2 0 2	0 14 0 14	0 5 0 5	0 4 0 4	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
403_356	DE - Overhd Conductr, Devices	DIST_CUST DIST_DEMAND DIST_ENERGY Total	0 43 0 43	0 0 0 0	0 43 0 43	0 22 0 22	0 2 0 2	0 12 0 12	0 4 0 4	0 3 0 3	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
403_357	DE - Underground Conduit	DIST_CUST DIST_DEMAND DIST_ENERGY Total	0 1 0 1	0 0 0 0	0 1 0 1	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
403_358	DE - Undergrmd Conductr, Devices	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0	0

PENNSYLVANIA POWER COMPANY
COST OF SERVICE STUDY - TOTAL SUMMARY
FULLY FUTURE TEST YEAR
COMPANY PREFERRED ALLOCATION METHOD
DEPRECIATION & AMORTIZATION, \$1,000s

ACCOUNT	DESCRIPTION	DETAILED ACCOUNT	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
		DIST_DEMAND	1	0	1	0	0	0	0	0	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	1	0	1	0	0	0	0	0	0	0	0	0	0
403_359	DE - Roads And Trails	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	0	0	0	0	0	0	0	0	0	0	0	0	0
403_360	DE - Land	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	0	0	0	0	0	0	0	0	0	0	0	0	0
403_361	DE - Structures	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	24	0	24	12	0	1	6	2	2	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	24	0	24	12	0	1	6	2	2	0	0	0	0
403_362	DE - Station	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	1,554	0	1,554	783	1	60	425	154	124	2	2	4	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	1,554	0	1,554	783	1	60	425	154	124	2	2	4	0
403_364	DE - Poles	DIST_CUST	2,179	0	2,179	1,731	1	136	113	2	76	1	10	110	0
		DIST_DEMAND	514	0	514	271	0	21	147	53	19	1	1	2	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	2,693	0	2,693	2,002	1	157	260	55	94	2	10	112	0
403_365	DE - OH Conductors	DIST_CUST	3,804	0	3,804	2,833	1	223	185	3	540	2	16	2	0
		DIST_DEMAND	427	0	427	201	0	15	109	40	61	0	1	1	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	4,232	0	4,232	3,033	2	238	293	43	601	2	16	3	0
403_366	DE - Underground Conduit	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	142	0	142	75	0	6	41	15	6	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	142	0	142	75	0	6	41	15	6	0	0	0	0

PENNSYLVANIA POWER COMPANY
COST OF SERVICE STUDY - TOTAL SUMMARY
FULLY FUTURE TEST YEAR
COMPANY PREFERRED ALLOCATION METHOD
DEPRECIATION & AMORTIZATION, \$1,000s

ACCOUNT	DESCRIPTION	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
403_367	DE - Underground Conductors	1,341	0	1,341	1,143	1	90	74	1	24	1	6	1	0
		242	0	242	130	0	10	71	26	4	0	0	1	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	1,583	0	1,583	1,273	1	100	145	27	28	1	7	1	0
403_368	DE - XFMRs	1,802	0	1,802	1,564	1	123	102	2	0	1	9	1	0
		1,197	0	1,197	655	1	50	355	129	0	1	2	4	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	2,999	0	2,999	2,219	1	173	457	131	0	2	11	5	0
403_369	DE - Services	533	0	533	462	0	36	30	1	0	0	3	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	533	0	533	462	0	36	30	1	0	0	3	0	0
403_370	DE - Meters	2,586	0	2,586	1,869	1	162	244	55	188	2	0	0	66
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	2,586	0	2,586	1,869	1	162	244	55	188	2	0	0	66
403_371	DE - Customer Premises	77	0	77	0	0	0	0	0	0	0	0	77	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	77	0	77	0	0	0	0	0	0	0	0	77	0
403_372	DE - Leased Property Cust. Prem.	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
403_373	DE - Streetlight	356	0	356	0	0	0	0	0	0	0	0	356	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	356	0	356	0	0	0	0	0	0	0	0	356	0
403_389	DE - Land	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0

PENNSYLVANIA POWER COMPANY
COST OF SERVICE STUDY - TOTAL SUMMARY
FULLY FUTURE TEST YEAR
COMPANY PREFERRED ALLOCATION METHOD
DEPRECIATION & AMORTIZATION, \$1,000s

Penn Power Exhibit TJD-1
 Witness: T. J. Dolezal
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ACCOUNT	DESCRIPTION	DETAILED ACCOUNT	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
403_390	DE - Structures	DIST_CUST DIST_DEMAND DIST_ENERGY Total	78 26 0 104	0 0 0 0	78 26 0 104	60 14 0 73	0 0 0 0	5 1 0 6	4 7 0 12	0 3 0 3	0 1 0 6	5 1 0 6	0 0 0 0	1 0 0 1	3 0 0 3
403_391	DE - Office Equipment	DIST_CUST DIST_DEMAND DIST_ENERGY Total	1,142 385 0 1,527	0 0 0 0	1,142 385 0 1,527	878 200 0 1,078	0 0 0 1	70 15 85	62 108 170	3 39 42	3 20 92	71 20 1	1 0 1	14 1 14	41 1 42
403_392	DE - Transportation	DIST_CUST DIST_DEMAND DIST_ENERGY Total	45 15 0 60	0 0 0 0	45 15 0 60	34 8 0 42	0 0 0 3	3 1 0 7	2 4 0 2	0 2 0 2	0 1 0 4	3 2 0 4	0 0 0 0	1 0 0 1	2 0 0 2
403_393	DE - Stores Equipment	DIST_CUST DIST_DEMAND DIST_ENERGY Total	14 5 0 19	0 0 0 0	14 5 0 19	11 2 0 13	0 0 0 1	1 0 0 2	1 1 0 1	0 0 0 1	0 0 0 1	0 0 0 1	0 0 0 0	0 0 0 0	1 0 0 1
403_394	DE - Tools & Garage Equip.	DIST_CUST DIST_DEMAND DIST_ENERGY Total	155 52 0 207	0 0 0 0	155 52 0 207	119 27 0 146	0 0 0 11	9 2 0 23	8 15 0 6	0 5 0 6	0 3 0 12	10 3 0 6	0 0 0 0	2 0 0 2	6 0 0 6
403_395	DE - Laboratory	DIST_CUST DIST_DEMAND DIST_ENERGY Total	4 1 0 5	0 0 0 0	4 1 0 5	3 1 0 4	0 0 0 0	0 0 0 1	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
403_396	DE - Power Equipment	DIST_CUST DIST_DEMAND DIST_ENERGY Total	19 6 0 26	0 0 0 0	19 6 0 26	15 3 0 18	0 0 0 1	1 0 0 3	1 2 0 1	0 1 0 1	0 1 0 2	1 0 0 1	0 0 0 0	0 0 0 0	1 0 0 1
403_397	DE - Communications Equipment	DIST_CUST DIST_DEMAND DIST_ENERGY Total	169 57 0 226	0 0 0 0	169 57 0 226	130 29 0 159	0 0 0 13	10 2 0 25	9 16 0 6	0 6 0 6	0 3 0 6	11 3 0 14	0 0 0 0	2 0 0 2	6 0 0 6

PENNSYLVANIA POWER COMPANY
COST OF SERVICE STUDY - TOTAL SUMMARY
FULLY FUTURE TEST YEAR
COMPANY PREFERRED ALLOCATION METHOD
DEPRECIATION & AMORTIZATION, \$1,000s

ACCOUNT	DESCRIPTION	DETAILED ACCOUNT	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
403_398	DE - Misc. Equipment	DIST_CUST DIST_DEMAND DIST_ENERGY Total	3 1 0 4	0 0 0 0	3 1 0 4	2 1 0 3	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
404-5	Amortization and depletion of utility plant	DIST_CUST DIST_DEMAND DIST_ENERGY Total	1,431 508 0 1,939	0 0 0 0	1,431 508 0 1,939	1,103 263 0 1,366	1 20 0 1	87 143 0 219	77 52 0 55	4 28 0 118	90 28 0 118	1 1 0 1	17 1 0 1	50 2 0 52	3 0 0 3
ADJ_IS_Cost_of_Removal	IS Adj - Cost of Removal/Salvage	DIST_CUST DIST_DEMAND DIST_ENERGY Total	3,608 1,216 0 4,823	0 0 0 0	3,608 1,216 0 4,823	2,775 630 0 3,405	1 1 0 2	220 48 0 268	194 342 0 536	9 124 0 133	225 64 0 289	2 1 0 3	43 2 0 44	131 4 0 134	7 0 0 7
ADJ_IS_Salvage	IS Adj - Average net Salvage	DIST_CUST DIST_DEMAND DIST_ENERGY Total	(544) (183) 0 (728)	0 0 0 0	(544) (183) 0 (728)	(419) (95) 0 (514)	(0) (0) 0 (0)	(33) (7) 0 (40)	(29) (52) 0 (81)	(1) (19) 0 (20)	(34) (10) 0 (44)	(0) (0) 0 (0)	(6) (0) 0 (7)	(20) (1) 0 (20)	(1) 0 0 (1)
ADJ_IS_Acc_Depr_Leg_IS_Adj	DE Accelerated Dep. Legacy Meters	DIST_CUST DIST_DEMAND DIST_ENERGY Total	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
	Depreciation Expense	DIST_CUST DIST_DEMAND DIST_ENERGY Total	18,127 6,260 0 24,387	0 0 0 0	18,127 6,260 0 24,387	13,758 3,246 0 17,004	7 4 11	1,110 247 1,357	1,047 1,761 2,808	78 639 717	1,160 330 1,490	9 7 16	191 9 199	688 19 707	78 0 78
407_Dist	Amortization - Rate Case Expense	DIST_CUST DIST_DEMAND DIST_ENERGY Total	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
407_STORM	Amortization - Storm Reserve	DIST_CUST DIST_DEMAND DIST_ENERGY Total	4 1 0 5	0 0 0 0	4 1 0 5	3 1 0 4	0 0 0 0	0 0 0 0	0 0 0 1	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0

PENNSYLVANIA POWER SERVICE COMPANY
COST OF SERVICE STUDY - TOTAL SUMMARY
FULLY FUTURE TEST YEAR
COMPANY PREFERRED ALLOCATION METHOD
DEPRECIATION & AMORTIZATION, \$1,000s

ACCOUNT	DESCRIPTION	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
407_SMT	Amortization - Smart Meter	118	0	118	85	0	7	11	2	9	0	0	0	3
	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	118	0	118	85	0	7	11	2	9	0	0	0	3

PENNSYLVANIA POWER COMPANY
COST OF SERVICE STUDY - TOTAL SUMMARY
FULLY FUTURE TEST YEAR
COMPANY PREFERRED ALLOCATION METHOD
DEPRECIATION & AMORTIZATION, \$1,000s

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ACCOUNT	DESCRIPTION	DETAILED ACCOUNT	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
407_SMIP	Amortization - SMIP Legacy Meters	DIST_CUST	2,159	0	2,159	1,560	1	135	204	46	157	2	0	0	55
		DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	2,159	0	2,159	1,560	1	135	204	46	157	2	0	0	55
411_10	Accretion expense	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	0	0	0	0	0	0	0	0	0	0	0	0	0
ADJ_IS_Meter_Amort	IS Adj - Amortization Expense	DIST_CUST	(583)	0	(583)	(421)	(0)	(36)	(55)	(12)	(42)	(0)	0	0	(15)
		DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	(583)	0	(583)	(421)	(0)	(36)	(55)	(12)	(42)	(0)	0	0	(15)
	Total Amortization Expense	DIST_CUST	1,699	0	1,699	1,227	1	106	160	36	123	1	0	0	43
		DIST_DEMAND	1	0	1	1	0	0	0	0	0	0	0	0	0
		DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	1,700	0	1,700	1,228	1	106	160	36	124	1	0	0	43
	Depreciation Expense	DIST_CUST	13,633	-	13,633	10,299	5	836	806	67	879	7	138	527	69
		DIST_DEMAND	4,565	-	4,565	2,370	3	180	1,285	467	235	5	6	14	-
		DIST_ENERGY	-	-	-	-	-	-	-	-	-	-	-	-	-
		Total	18,198	-	18,198	12,668	8	1,017	2,091	534	1,115	12	144	541	69

PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 TAXES OTHER THAN INCOME, \$1,000s

ACCOUNT	DESCRIPTION	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
408_1GRT	OT - Gross Receipts Tax	4,230	0	4,230	3,463	3	197	263	21	137	3	22	42	79
		1,139	0	1,139	538	1	29	356	192	18	2	1	2	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	5,369	0	5,369	4,000	4	226	620	214	155	5	23	44	79
408_1LND	OT - Property Tax	258	0	258	199	0	16	14	1	16	0	3	9	1
		92	0	92	47	0	4	26	9	5	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	349	0	349	246	0	19	40	10	21	0	3	9	1
408_1PAY	OT - Payroll Tax	436	0	436	352	0	25	21	1	33	0	2	2	1
		59	0	59	29	0	2	16	6	6	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	495	0	495	381	0	27	37	7	39	0	2	2	1
408_1CAP	OT - Capital Stock Tax	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
408_1MISC	OT - Misc. Tax	1	0	1	1	1	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	1	0	1	1	1	0	0	0	0	0	0	0	0
ADJ_IS_Payrc IS Adj. Payroll Tax		6	0	6	5	0	0	0	0	0	0	0	0	0
		1	0	1	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	7	0	7	5	0	0	0	0	0	0	0	0	0
ADJ_IS_Other IS Adj. Other Tax		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Taxes Other than Income Taxes		4,931	0	4,931	4,019	3	237	299	23	187	3	26	53	81
		1,291	0	1,291	615	1	35	398	208	28	2	1	2	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	6,222	0	6,222	4,634	4	272	697	230	215	5	28	55	81

**PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - INCOME TAXES
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 PRESENT RATES, \$1,000s**

DESCRIPTION	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
Distribution													
Distribution Revenue	71,689	0	71,689	58,686	42	3,334	4,462	360	2,323	48	368	719	1,347
Total Operating Expense	32,553	0	32,553	26,625	11	1,662	1,483	52	2,455	13	115	103	35
Income Before Taxes	12,926	0	12,926	10,231	28	(205)	3,091	1,854	(2,771)	30	(9)	(417)	1,093
Tax Deductions	(2,784)	0	(2,784)	(1,823)	(1)	(145)	(403)	(113)	(113)	(2)	(52)	(168)	36
State Taxable Income	10,142	0	10,142	8,408	27	(350)	2,688	1,741	(2,884)	29	(60)	(585)	1,129
Current State Income Tax	2,203	0	2,203	1,680	3	31	401	207	(217)	4	5	(25)	115
Federal Taxable Income	7,939	0	7,939	6,728	24	(381)	2,287	1,534	(2,667)	25	(65)	(560)	1,014
Current Federal Income Tax	2,778	0	2,778	2,355	8	(133)	800	537	(933)	9	(23)	(196)	355
Provision for Deferred Income Taxes	6,351	0	6,351	4,484	3	353	706	175	415	4	37	161	11
Investment Tax Credit Adjustments	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Income Tax	11,333	0	11,333	8,520	14	251	1,907	919	(735)	16	20	(60)	481

PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - LABOR
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 PRESENT RATES, \$1,000s

ACCOUNT	DESCRIPTION	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
580L	OP - Supv. & Engineering Labor													
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
581L	OP - Dispatching Labor													
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
582L	OP - Distribution Expense Station Labor													
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
583L	OP - Overhead Line Labor													
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
584L	OP - Underground Line Labor													
		(0)	0	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	0
		(0)	0	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	(0)	0	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	0
586L	OP - Meter Labor													
		64	0	64	46	0	4	6	1	5	0	0	0	2
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	64	0	64	46	0	4	6	1	5	0	0	0	2
588L	OP - Misc. Expenses													
		636	0	636	489	0	39	34	2	40	0	8	23	1
		214	0	214	111	0	8	60	22	11	0	0	1	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	850	0	850	600	0	47	95	23	51	1	8	24	1

PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - LABOR
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 PRESENT RATES, \$1,000s

ACCOUNT	DESCRIPTION	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
589L	Rents Labor	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
590L	MN- Supv. & Engineering Labor	58	0	58	43	0	3	3	0	8	0	0	0	0
	DIST_CUST	12	0	12	6	0	0	3	1	1	0	0	0	0
	DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	70	0	70	49	0	4	6	1	9	0	0	0	0
591L	MN - Structures Labor	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
592L	MN - Station Labor	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_CUST	363	0	363	183	0	14	99	36	29	0	0	1	0
	DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	363	0	363	183	0	14	99	36	29	0	0	1	0
593L	MN - OH Conductors Labor	3,541	0	3,541	2,636	1	207	172	3	503	2	15	2	0
	DIST_CUST	398	0	398	187	0	14	101	37	56	0	1	1	0
	DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	3,938	0	3,938	2,823	1	222	273	40	559	2	15	3	0
594L	MN - UG Conductors Labor	48	0	48	41	0	3	3	0	1	0	0	0	0
	DIST_CUST	9	0	9	5	0	0	3	1	0	0	0	0	0
	DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	56	0	56	45	0	4	5	1	1	0	0	0	0
595L	MN - XFMRs Labor	28	0	28	25	0	2	2	0	0	0	0	0	0
	DIST_CUST	19	0	19	10	0	1	6	2	0	0	0	0	0
	DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	47	0	47	35	0	3	7	2	0	0	0	0	0
596L	MN - Streetlights Labor	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0

PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - LABOR
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 PRESENT RATES, \$1,000s

ACCOUNT	DESCRIPTION	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	STLT	GT
597L	MN - Meters Labor	239	0	239	173	0	15	23	5	17	0	0	0	0	6
	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	239	0	239	173	0	15	23	5	17	0	0	0	0	6
598L	MN - Misc Labor	12	0	12	9	0	1	1	0	1	0	0	0	0	0
	DIST_CUST	4	0	4	2	0	1	1	0	0	0	0	0	0	0
	DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	16	0	16	11	0	1	2	0	1	0	0	0	0	0
	Labor Expense - Distribution	4,625	0	4,625	3,461	2	274	242	11	574	2	23	25	9	
	DIST_CUST	1,019	0	1,019	504	1	38	273	99	98	1	1	3	0	
	DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0	
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Total	5,643	0	5,643	3,965	2	313	516	110	673	3	24	28	9	
902L	Customer Account Supervision - Labor	929	0	929	753	1	94	77	2	1	1	0	0	0	0
	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	929	0	929	753	1	94	77	2	1	1	0	0	0	0
903L	Customer Account Collections - Labor	671	0	671	582	0	46	38	1	0	0	3	0	0	0
	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	671	0	671	582	0	46	38	1	0	0	3	0	0	0
905L	Customer Account Accountants - Labor	61	0	61	53	0	4	3	0	0	0	0	0	0	0
	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	61	0	61	53	0	4	3	0	0	0	0	0	0	0
	Labor Expense - Customer Accounts	1,661	0	1,661	1,388	1	144	118	3	2	1	4	0	1	
	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	1,661	0	1,661	1,388	1	144	118	3	2	1	4	0	1	
907L	Customer Info Supervision Labor	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
908L	Customer Info Assistance Labor	273	0	273	273	0	0	0	0	0	0	0	0	0	0
	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0	0

PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - LABOR
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 PRESENT RATES, \$1,000s

ACCOUNT	DESCRIPTION	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
	DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	273	0	273	273	0	0	0	0	0	0	0	0	0
909L	Customer Info Advertising Labor													
	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
910L	Customer Info Misc. Expense Labor													
	DIST_CUST	1,042	0	1,042	1,020	0	11	9	0	0	0	0	1	0
	DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	1,042	0	1,042	1,020	0	11	9	0	0	0	0	1	0
911L	Sales Supervision Labor													
	DIST_CUST	6	0	6	5	0	0	0	0	0	0	0	0	0
	DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	6	0	6	5	0	0	0	0	0	0	0	0	0
913L	Advertising Labor													
	DIST_CUST	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
	Labor Expense - Customer Information													
	DIST_CUST	1,322	0	1,322	1,299	0	11	9	0	0	0	0	1	0
	DIST_DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	1,322	0	1,322	1,299	0	11	9	0	0	0	0	1	0
	Labor Expense - less A & G													
	DIST_CUST	7,608	0	7,608	6,148	3	429	370	14	576	4	27	27	10
	DIST_DEMAND	1,019	0	1,019	504	1	38	273	99	98	1	1	3	0
	DIST_ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	8,626	0	8,626	6,652	4	467	643	113	674	5	29	29	10

PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - LABOR
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 PRESENT RATES, \$1,000s

ACCOUNT	DESCRIPTION	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
920L	A&G Salaries Labor													
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
921L	A&G Office Supplies Labor													
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
922L	A&G Admin. Expenses Labor													
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
923L	A&G Outside Services Labor													
		356	0	356	287	0	20	17	1	27	0	1	1	0
		48	0	48	24	0	2	13	5	5	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	403	0	403	311	0	22	30	5	32	0	1	1	0
924L	A&G Property Insurance Labor													
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
925L	A&G Injury and Damages Labor													
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0

PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - LABOR
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 PRESENT RATES, \$1,000s

ACCOUNT	DESCRIPTION	TOTAL RETAIL	NY JURIS	PA JURIS	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
926L	A&G Pension and Benefits Labor													
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
930_1L	A&G General Advertising Labor													
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
930_2L	A&G Misc. Expense Labor													
		6	0	6	5	0	0	0	0	0	0	0	0	0
		1	0	1	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	7	0	7	5	0	0	1	0	1	0	0	0	0
931L	A&G Rent Labor													
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
935L	A&G Maint. Of General Plant Labor													
		65	0	65	50	0	4	3	0	4	0	1	2	0
		22	0	22	11	0	1	6	2	1	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	87	0	87	61	0	5	10	2	5	0	1	2	0
		426	0	426	342	0	24	21	1	31	0	2	4	1
		70	0	70	35	0	3	19	7	6	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	497	0	497	377	0	27	40	8	37	0	2	4	1
	Labor Expense - A & G	8,034	0	8,034	6,490	3	453	391	15	608	4	30	30	10
		1,089	0	1,089	539	1	41	292	106	104	1	1	3	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	9,123	0	9,123	7,029	4	494	683	121	712	5	31	33	10

PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 ALLOCATION METHODS

METHOD	DETAILED ACCOUNT	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
Collections Expense	TOTAL RETAIL	100.0%	86.7%	0.0%	6.8%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%
	DIST_CUST	100.0%	86.7%	0.0%	6.8%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%
	DIST_DEMAND	100.0%	86.7%	0.0%	6.8%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%
Customer Accounting Expenses	Total	100.0%	86.7%	0.0%	6.8%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%
	DIST_CUST	100.0%	86.7%	0.0%	6.8%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%
	DIST_DEMAND	100.0%	86.7%	0.0%	6.8%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%
Customer Information Assistance	Total	100.0%	86.7%	0.0%	6.8%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%
	DIST_CUST	100.0%	86.7%	0.0%	6.8%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%
	DIST_DEMAND	100.0%	86.7%	0.0%	6.8%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%
Customer Information Expenses	Total	100.0%	86.7%	0.0%	6.8%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%
	DIST_CUST	100.0%	86.7%	0.0%	6.8%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%
	DIST_DEMAND	100.0%	86.7%	0.0%	6.8%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%
Customers - POL	Total	100.0%	86.7%	0.0%	6.8%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%
	DIST_CUST	100.0%	86.7%	0.0%	6.8%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%
	DIST_DEMAND	100.0%	86.7%	0.0%	6.8%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%
Customers - Residential	Total	100.0%	86.7%	0.0%	6.8%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%
	DIST_CUST	100.0%	86.7%	0.0%	6.8%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%
	DIST_DEMAND	100.0%	86.7%	0.0%	6.8%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%
Customers - Secondary	Total	100.0%	86.7%	0.0%	6.8%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%
	DIST_CUST	100.0%	86.7%	0.0%	6.8%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%
	DIST_DEMAND	100.0%	86.7%	0.0%	6.8%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%

PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 ALLOCATION METHODS

METHOD	DETAILED ACCOUNT	TOTAL RETAIL	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
Customers - STLT	DIST_CUST	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
	DIST_DEMAND											
	DIST_ENERGY											
	Total	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Customers - Total	DIST_CUST	100.0%	86.7%	0.0%	6.8%	5.7%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%
	DIST_DEMAND											
	DIST_ENERGY											
	Total	100.0%	86.7%	0.0%	6.8%	5.7%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%
D & G Net Plant	DIST_CUST	74.9%	57.6%	0.0%	4.6%	4.1%	0.2%	5.2%	0.0%	0.6%	2.5%	0.2%
	DIST_DEMAND	25.1%	13.0%	0.0%	1.0%	7.0%	2.6%	1.4%	0.0%	0.0%	0.1%	
	DIST_ENERGY											
	Total	100.0%	70.6%	0.0%	5.6%	11.1%	2.8%	6.5%	0.1%	0.6%	2.5%	0.2%
D & G Original Cost Plant	DIST_CUST	73.8%	56.9%	0.0%	4.5%	4.0%	0.2%	4.6%	0.0%	0.9%	2.6%	0.1%
	DIST_DEMAND	26.2%	13.6%	0.0%	1.0%	7.4%	2.7%	1.4%	0.0%	0.0%	0.1%	
	DIST_ENERGY											
	Total	100.0%	70.4%	0.0%	5.5%	11.3%	2.9%	6.1%	0.1%	0.9%	2.7%	0.1%
D Original Cost Plant, 360 Accounts	DIST_CUST	72.5%	58.1%	0.0%	4.6%	3.8%	0.1%	4.6%	0.0%	0.3%	0.9%	
	DIST_DEMAND	27.5%	14.3%	0.0%	1.1%	7.7%	2.8%	1.4%	0.0%	0.0%	0.1%	
	DIST_ENERGY											
	Total	100.0%	72.4%	0.0%	5.7%	11.5%	2.9%	6.1%	0.1%	0.4%	1.0%	0.0%
D Original Cost Plant, 360 OH	DIST_CUST	89.9%	66.9%	0.0%	5.3%	4.4%	0.1%	12.8%	0.0%	0.4%	0.0%	
	DIST_DEMAND	10.1%	4.7%	0.0%	0.4%	2.6%	0.9%	1.4%	0.0%	0.0%	0.0%	
	DIST_ENERGY											
	Total	100.0%	71.7%	0.0%	5.6%	6.9%	1.0%	14.2%	0.1%	0.4%	0.1%	0.0%
D Original Cost Plant, 580 Accounts	DIST_CUST	72.4%	55.5%	0.0%	4.4%	4.1%	0.3%	4.6%	0.0%	0.8%	2.4%	0.3%
	DIST_DEMAND	27.6%	15.3%	0.0%	1.2%	6.9%	2.4%	1.5%	0.0%	0.0%	0.1%	0.1%
	DIST_ENERGY											
	Total	100.0%	70.8%	0.0%	5.6%	11.0%	2.7%	6.1%	0.1%	0.8%	2.5%	0.4%

PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 ALLOCATION METHODS

METHOD	DETAILED ACCOUNT	TOTAL RETAIL	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
D Original Cost Plant, 590 Accounts	DIST_CUST	82.9%	61.7%	0.0%	4.9%	4.1%	0.1%	11.6%	0.0%	0.3%	0.0%	0.0%
	DIST_DEMAND	17.1%	8.3%	0.0%	0.6%	4.5%	1.6%	1.9%	0.0%	0.0%	0.0%	0.0%
	DIST_ENERGY	100.0%	70.0%	0.0%	5.5%	8.6%	1.7%	13.5%	0.1%	0.4%	0.1%	0.0%
	Total											
Demand - Non-Concident Peak	DIST_CUST	100.0%	50.4%	0.1%	3.8%	27.3%	9.9%	8.0%	0.1%	0.1%	0.3%	
	DIST_DEMAND											
	DIST_ENERGY	100.0%	50.4%	0.1%	3.8%	27.3%	9.9%	8.0%	0.1%	0.1%	0.3%	0.0%
	Total											
Deposits	DIST_CUST	100.0%	53.2%	0.1%	4.6%	32.2%	3.4%	2.4%	0.1%	0.0%		3.9%
	DIST_DEMAND											
	DIST_ENERGY	100.0%	53.2%	0.1%	4.6%	32.2%	3.4%	2.4%	0.1%	0.0%	0.0%	3.9%
	Total											
Direct Assignment - Waverly	DIST_CUST	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	DIST_DEMAND											
	DIST_ENERGY	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Total											
Dist Net Plant	DIST_CUST	74.7%	57.5%	0.0%	4.6%	4.0%	0.2%	4.4%	0.0%	1.1%	2.9%	0.1%
	DIST_DEMAND	25.3%	13.1%	0.0%	1.0%	7.1%	2.6%	1.3%	0.0%	0.0%	0.1%	0.1%
	DIST_ENERGY	100.0%	70.6%	0.0%	5.5%	11.1%	2.8%	5.7%	0.1%	1.1%	2.9%	0.1%
	Total											
Dist Original Cost Plant	DIST_CUST	74.8%	57.5%	0.0%	4.6%	4.0%	0.2%	4.7%	0.0%	0.9%	2.7%	0.2%
	DIST_DEMAND	25.2%	13.1%	0.0%	1.0%	7.1%	2.6%	1.3%	0.0%	0.0%	0.1%	0.1%
	DIST_ENERGY	100.0%	70.6%	0.0%	5.6%	11.1%	2.8%	6.0%	0.1%	0.9%	2.8%	0.2%
	Total											
Expense - Total A & G Less Adj.	DIST_CUST	87.0%	69.9%	0.0%	4.9%	4.3%	0.2%	6.7%	0.0%	0.4%	0.5%	0.1%
	DIST_DEMAND	13.0%	6.4%	0.0%	0.5%	3.5%	1.3%	1.2%	0.0%	0.0%	0.0%	0.0%
	DIST_ENERGY	100.0%	76.4%	0.0%	5.4%	7.8%	1.4%	7.9%	0.1%	0.4%	0.5%	0.1%
	Total											

**PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 ALLOCATION METHODS**

METHOD	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
EXPENSE - Total Less A & G										
Expense - Total Less A & G	73.1%	0.0%	4.3%	3.9%	0.1%	6.7%	0.0%	0.3%	0.2%	0.1%
TOTAL RETAIL	88.9%	0.0%	4.3%	3.9%	0.1%	6.7%	0.0%	0.3%	0.2%	0.1%
DIST_CUST	11.1%	0.0%	0.4%	3.0%	1.1%	1.1%	0.0%	0.0%	0.0%	0.0%
DIST_DEMAND										
DIST_ENERGY										
Total	100.0%	0.0%	4.8%	6.9%	1.2%	7.8%	0.0%	0.3%	0.3%	0.1%
Forfeited Discounts										
DIST_CUST	86.7%	0.0%	6.8%	5.7%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%
DIST_DEMAND										
DIST_ENERGY										
Total	100.0%	0.0%	6.8%	5.7%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%
Gen Original Cost Plant										
DIST_CUST	57.5%	0.0%	4.6%	4.0%	0.2%	4.7%	0.0%	0.9%	2.7%	0.2%
DIST_DEMAND	25.2%	0.0%	1.0%	7.1%	2.6%	1.3%	0.0%	0.0%	0.1%	
DIST_ENERGY										
Total	100.0%	0.0%	5.6%	11.1%	2.8%	6.0%	0.1%	0.9%	2.8%	0.2%
Labor Expense - Customer Accounts										
DIST_CUST	83.6%	0.1%	8.6%	7.1%	0.2%	0.1%	0.1%	0.2%	0.0%	0.0%
DIST_DEMAND										
DIST_ENERGY										
Total	100.0%	0.1%	8.6%	7.1%	0.2%	0.1%	0.1%	0.2%	0.0%	0.0%
Labor Expense - Customer Information										
DIST_CUST	98.3%	0.0%	0.8%	0.7%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%
DIST_DEMAND										
DIST_ENERGY										
Total	100.0%	0.0%	0.8%	0.7%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%
Labor Expense - Distribution										
DIST_CUST	61.3%	0.0%	4.9%	4.3%	0.2%	10.2%	0.0%	0.4%	0.4%	0.2%
DIST_DEMAND	18.1%	0.0%	0.7%	4.8%	1.8%	1.7%	0.0%	0.0%	0.1%	
DIST_ENERGY										
Total	100.0%	0.0%	5.5%	9.1%	2.0%	11.9%	0.1%	0.4%	0.5%	0.2%
Labor Expense - less A & G										
DIST_CUST	71.3%	0.0%	5.0%	4.3%	0.2%	6.7%	0.0%	0.3%	0.3%	0.1%
DIST_DEMAND	11.8%	0.0%	0.4%	3.2%	1.2%	1.1%	0.0%	0.0%	0.0%	
DIST_ENERGY										
Total	100.0%	0.0%	5.4%	7.5%	1.3%	7.8%	0.1%	0.3%	0.3%	0.1%

PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 ALLOCATION METHODS

METHOD	LABOR EXPENSE - TOTAL	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
DETAILED ACCOUNT	TOTAL RETAIL										
DIST_CUST	88.1%	71.1%	0.0%	5.0%	4.3%	0.2%	6.7%	0.0%	0.3%	0.3%	0.1%
DIST_DEMAND	11.9%	5.9%	0.0%	0.4%	3.2%	1.2%	1.1%	0.0%	0.0%	0.0%	0.0%
DIST_ENERGY											
Total	100.0%	77.0%	0.0%	5.4%	7.5%	1.3%	7.8%	0.1%	0.3%	0.4%	0.1%
Meter Plant											
DIST_CUST	100.0%	72.3%	0.0%	6.3%	9.4%	2.1%	7.3%	0.1%			2.6%
DIST_DEMAND											
DIST_ENERGY											
Total	100.0%	72.3%	0.0%	6.3%	9.4%	2.1%	7.3%	0.1%	0.0%	0.0%	2.6%
Meter Reading Expense											
DIST_CUST	100.0%	81.1%	0.1%	10.1%	8.3%	0.2%	0.1%	0.1%			0.0%
DIST_DEMAND											
DIST_ENERGY											
Total	100.0%	81.1%	0.1%	10.1%	8.3%	0.2%	0.1%	0.1%	0.0%	0.0%	0.0%
OH Conductors - Primary											
DIST_CUST	0.1%						0.1%				
DIST_DEMAND	99.9%						99.9%				
DIST_ENERGY											
Total	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
OH Conductors - Secondary											
DIST_CUST	15.8%	13.7%	0.0%	1.1%	0.9%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
DIST_DEMAND	84.2%	46.1%	0.1%	3.5%	25.0%	9.1%	0.1%	0.1%	0.1%	0.3%	0.0%
DIST_ENERGY											
Total	100.0%	59.8%	0.1%	4.6%	25.9%	9.1%	0.0%	0.1%	0.2%	0.3%	0.0%
Plant - Account 302 (Intangible Plant)											
DIST_CUST	74.9%	57.6%	0.0%	4.6%	4.1%	0.2%	5.2%	0.0%	0.6%	2.5%	0.2%
DIST_DEMAND	25.1%	13.0%	0.0%	1.0%	7.0%	2.6%	1.4%	0.0%	0.0%	0.1%	0.0%
DIST_ENERGY											
Total	100.0%	70.6%	0.0%	5.6%	11.1%	2.8%	6.5%	0.1%	0.6%	2.5%	0.2%
Plant - Account 303 (Intangible Plant)											
DIST_CUST	88.9%	73.1%	0.0%	4.3%	3.9%	0.1%	6.7%	0.0%	0.3%	0.2%	0.1%
DIST_DEMAND	11.1%	5.5%	0.0%	0.4%	3.0%	1.1%	1.1%	0.0%	0.0%	0.0%	0.0%
DIST_ENERGY											
Total	100.0%	78.6%	0.0%	4.8%	6.9%	1.2%	7.8%	0.0%	0.3%	0.3%	0.1%

PENNSYLVANIA POWER COMPANY
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 COMPANY PREFERRED ALLOCATION METHOD
 ALLOCATION METHODS

METHOD	DETAILED ACCOUNT	TOTAL RETAIL	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
Plant - Account 360 (Land)	DIST_CUST	72.5%	58.1%	0.0%	4.6%	3.8%	0.1%	4.6%	0.0%	0.3%	0.9%	
	DIST_DEMAND	27.5%	14.3%	0.0%	1.1%	7.7%	2.8%	1.4%	0.0%	0.0%	0.1%	
	DIST_ENERGY											
	Total	100.0%	72.4%	0.0%	5.7%	11.5%	2.9%	6.1%	0.1%	0.4%	1.0%	0.0%
Plant - Account 361 (Structures)	DIST_CUST											
	DIST_DEMAND	100.0%	50.4%	0.1%	3.8%	27.3%	9.9%	8.0%	0.1%	0.1%	0.3%	
	DIST_ENERGY											
	Total	100.0%	50.4%	0.1%	3.8%	27.3%	9.9%	8.0%	0.1%	0.1%	0.3%	0.0%
Plant - Account 362 (Station)	DIST_CUST											
	DIST_DEMAND	100.0%	50.4%	0.1%	3.8%	27.3%	9.9%	8.0%	0.1%	0.1%	0.3%	
	DIST_ENERGY											
	Total	100.0%	50.4%	0.1%	3.8%	27.3%	9.9%	8.0%	0.1%	0.1%	0.3%	0.0%
Plant - Account 364 (Poles)	DIST_CUST											
	DIST_DEMAND	81.7%	64.9%	0.0%	5.1%	4.2%	0.1%	2.8%	0.0%	0.4%	4.1%	
	DIST_ENERGY	18.3%	9.7%	0.0%	0.7%	5.2%	1.9%	0.7%	0.0%	0.0%	0.1%	
	Total	100.0%	74.5%	0.0%	5.8%	9.5%	2.0%	3.5%	0.1%	0.4%	4.2%	0.0%
Plant - Account 365 (OH Conductors)	DIST_CUST											
	DIST_DEMAND	89.9%	66.9%	0.0%	5.3%	4.4%	0.1%	12.8%	0.0%	0.4%	0.0%	
	DIST_ENERGY	10.1%	4.7%	0.0%	0.4%	2.6%	0.9%	1.4%	0.0%	0.0%	0.0%	
	Total	100.0%	71.7%	0.0%	5.6%	6.9%	1.0%	14.2%	0.1%	0.4%	0.1%	0.0%
Plant - Account 366 (UG Conduits)	DIST_CUST											
	DIST_DEMAND	100.0%	52.6%	0.1%	4.0%	28.5%	10.4%	3.9%	0.1%	0.1%	0.3%	
	DIST_ENERGY											
	Total	100.0%	52.6%	0.1%	4.0%	28.5%	10.4%	3.9%	0.1%	0.1%	0.3%	0.0%
Plant - Account 367 (UG Conductors)	DIST_CUST											
	DIST_DEMAND	84.7%	72.2%	0.0%	5.7%	4.7%	0.1%	1.5%	0.0%	0.4%	0.0%	
	DIST_ENERGY	15.3%	8.2%	0.0%	0.6%	4.5%	1.6%	0.3%	0.0%	0.0%	0.0%	
	Total	100.0%	80.4%	0.0%	6.3%	9.2%	1.7%	1.8%	0.1%	0.4%	0.1%	0.0%

**PENNSYLVANIA POWER COMPANY
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 COMPANY PREFERRED ALLOCATION METHOD
 ALLOCATION METHODS**

METHOD	ACCOUNT	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
Plant - Account 368 (Transformers)	TOTAL RETAIL	60.1%	0.0%	4.1%	3.4%	0.1%	0.0%	0.0%	0.3%	0.0%	0.0%
	DIST_CUST	52.2%	0.0%	4.1%	3.4%	0.1%	0.0%	0.0%	0.3%	0.0%	0.0%
	DIST_DEMAND	21.8%	0.0%	1.7%	11.8%	4.3%	0.0%	0.0%	0.1%	0.1%	0.1%
	Total	100.0%	0.0%	5.8%	15.2%	4.4%	0.0%	0.1%	0.4%	0.2%	0.0%
Plant - Account 369 (Services)	TOTAL RETAIL	86.8%	0.0%	6.8%	5.7%	0.1%	0.0%	0.1%	0.5%	0.1%	0.1%
	DIST_CUST	86.8%	0.0%	6.8%	5.7%	0.1%	0.0%	0.1%	0.5%	0.1%	0.1%
	DIST_DEMAND	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Total	100.0%	0.0%	6.8%	5.7%	0.1%	0.0%	0.1%	0.5%	0.1%	0.0%
Plant - Account 370 (Meters)	TOTAL RETAIL	72.3%	0.0%	6.3%	9.4%	2.1%	7.3%	0.1%	0.0%	0.0%	2.6%
	DIST_CUST	72.3%	0.0%	6.3%	9.4%	2.1%	7.3%	0.1%	0.0%	0.0%	2.6%
	DIST_DEMAND	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Total	100.0%	0.0%	6.3%	9.4%	2.1%	7.3%	0.1%	0.0%	0.0%	2.6%
Plant - Account 371 (Cust Premises)	TOTAL RETAIL	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	DIST_CUST	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	DIST_DEMAND	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Total	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Plant - Account 372 (Leased Property - Cust Prem.)	TOTAL RETAIL	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	DIST_CUST	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	DIST_DEMAND	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Total	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Plant - Account 373 (Streetlight)	TOTAL RETAIL	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	DIST_CUST	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	DIST_DEMAND	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Total	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Plant - Account 389 (Land - Misc)	TOTAL RETAIL	74.8%	0.0%	4.6%	4.0%	0.2%	4.7%	0.0%	0.9%	2.7%	0.2%
	DIST_CUST	57.5%	0.0%	4.6%	4.0%	0.2%	4.7%	0.0%	0.9%	2.7%	0.2%
	DIST_DEMAND	13.1%	0.0%	1.0%	7.1%	2.6%	1.3%	0.0%	0.0%	0.1%	0.1%
	Total	100.0%	0.0%	5.6%	11.1%	2.8%	6.0%	0.1%	0.9%	2.8%	0.2%

**PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 ALLOCATION METHODS**

METHOD	ACCOUNT	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
Plant - Account 390 (Structures - Misc)	TOTAL RETAIL	74.8%	0.0%	4.6%	4.0%	0.2%	4.7%	0.0%	0.9%	2.7%	0.2%
	DIST_CUST	57.5%	0.0%	4.6%	4.0%	0.2%	4.7%	0.0%	0.9%	2.7%	0.2%
	DIST_DEMAND	13.1%	0.0%	1.0%	7.1%	2.6%	1.3%	0.0%	0.0%	0.1%	0.1%
	Total	100.0%	0.0%	5.6%	11.1%	2.8%	6.0%	0.1%	0.9%	2.8%	0.2%
Plant - Account 391 (Office Equipment)	TOTAL RETAIL	74.8%	0.0%	4.6%	4.0%	0.2%	4.7%	0.0%	0.9%	2.7%	0.2%
	DIST_CUST	57.5%	0.0%	4.6%	4.0%	0.2%	4.7%	0.0%	0.9%	2.7%	0.2%
	DIST_DEMAND	13.1%	0.0%	1.0%	7.1%	2.6%	1.3%	0.0%	0.0%	0.1%	0.1%
	Total	100.0%	0.0%	5.6%	11.1%	2.8%	6.0%	0.1%	0.9%	2.8%	0.2%
Plant - Account 392 (Transportation)	TOTAL RETAIL	74.8%	0.0%	4.6%	4.0%	0.2%	4.7%	0.0%	0.9%	2.7%	0.2%
	DIST_CUST	57.5%	0.0%	4.6%	4.0%	0.2%	4.7%	0.0%	0.9%	2.7%	0.2%
	DIST_DEMAND	13.1%	0.0%	1.0%	7.1%	2.6%	1.3%	0.0%	0.0%	0.1%	0.1%
	Total	100.0%	0.0%	5.6%	11.1%	2.8%	6.0%	0.1%	0.9%	2.8%	0.2%
Plant - Account 393 (Stores)	TOTAL RETAIL	74.8%	0.0%	4.6%	4.0%	0.2%	4.7%	0.0%	0.9%	2.7%	0.2%
	DIST_CUST	57.5%	0.0%	4.6%	4.0%	0.2%	4.7%	0.0%	0.9%	2.7%	0.2%
	DIST_DEMAND	13.1%	0.0%	1.0%	7.1%	2.6%	1.3%	0.0%	0.0%	0.1%	0.1%
	Total	100.0%	0.0%	5.6%	11.1%	2.8%	6.0%	0.1%	0.9%	2.8%	0.2%
Plant - Account 394 (Tools & Garage Equipment)	TOTAL RETAIL	74.8%	0.0%	4.6%	4.0%	0.2%	4.7%	0.0%	0.9%	2.7%	0.2%
	DIST_CUST	57.5%	0.0%	4.6%	4.0%	0.2%	4.7%	0.0%	0.9%	2.7%	0.2%
	DIST_DEMAND	13.1%	0.0%	1.0%	7.1%	2.6%	1.3%	0.0%	0.0%	0.1%	0.1%
	Total	100.0%	0.0%	5.6%	11.1%	2.8%	6.0%	0.1%	0.9%	2.8%	0.2%
Plant - Account 395 (Laboratory)	TOTAL RETAIL	74.8%	0.0%	4.6%	4.0%	0.2%	4.7%	0.0%	0.9%	2.7%	0.2%
	DIST_CUST	57.5%	0.0%	4.6%	4.0%	0.2%	4.7%	0.0%	0.9%	2.7%	0.2%
	DIST_DEMAND	13.1%	0.0%	1.0%	7.1%	2.6%	1.3%	0.0%	0.0%	0.1%	0.1%
	Total	100.0%	0.0%	5.6%	11.1%	2.8%	6.0%	0.1%	0.9%	2.8%	0.2%
Plant - Account 396 (Power Equipment)	TOTAL RETAIL	74.8%	0.0%	4.6%	4.0%	0.2%	4.7%	0.0%	0.9%	2.7%	0.2%
	DIST_CUST	57.5%	0.0%	4.6%	4.0%	0.2%	4.7%	0.0%	0.9%	2.7%	0.2%
	DIST_DEMAND	13.1%	0.0%	1.0%	7.1%	2.6%	1.3%	0.0%	0.0%	0.1%	0.1%
	Total	100.0%	0.0%	5.6%	11.1%	2.8%	6.0%	0.1%	0.9%	2.8%	0.2%

**PENNSYLVANIA POWER COMPANY
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 COMPANY PREFERRED ALLOCATION METHOD
 ALLOCATION METHODS**

METHOD	ACCOUNT	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
Plant - Account 397 (Communications Equipment)	TOTAL RETAIL	74.8%	0.0%	4.6%	4.0%	0.2%	4.7%	0.0%	0.9%	2.7%	0.2%
	DIST_CUST	57.5%	0.0%	4.6%	4.0%	0.2%	4.7%	0.0%	0.9%	2.7%	0.2%
	DIST_DEMAND	13.1%	0.0%	1.0%	7.1%	2.6%	1.3%	0.0%	0.0%	0.1%	0.1%
	DIST_ENERGY										
	Total	100.0%	0.0%	5.6%	11.1%	2.8%	6.0%	0.1%	0.9%	2.8%	0.2%
Plant - Account 398 (Misc. Equipment)	TOTAL RETAIL	74.8%	0.0%	4.6%	4.0%	0.2%	4.7%	0.0%	0.9%	2.7%	0.2%
	DIST_CUST	57.5%	0.0%	4.6%	4.0%	0.2%	4.7%	0.0%	0.9%	2.7%	0.2%
	DIST_DEMAND	13.1%	0.0%	1.0%	7.1%	2.6%	1.3%	0.0%	0.0%	0.1%	0.1%
	DIST_ENERGY										
	Total	100.0%	0.0%	5.6%	11.1%	2.8%	6.0%	0.1%	0.9%	2.8%	0.2%
Expense - Account 580 (OP - Supv. & Engineering)	TOTAL RETAIL	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	DIST_CUST	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	DIST_DEMAND	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	DIST_ENERGY										
	Total	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Expense - Account 581 (OP - Dispatching)	TOTAL RETAIL	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	DIST_CUST	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	DIST_DEMAND	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	DIST_ENERGY										
	Total	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Expense - Account 583 (OP - Overhead Line)	TOTAL RETAIL	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	DIST_CUST	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	DIST_DEMAND	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	DIST_ENERGY										
	Total	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Expense - Account 584 (OP - Underground Line)	TOTAL RETAIL	84.7%	0.0%	5.7%	4.7%	0.1%	1.5%	0.0%	0.4%	0.0%	0.0%
	DIST_CUST	72.2%	0.0%	5.7%	4.7%	0.1%	1.5%	0.0%	0.4%	0.0%	0.0%
	DIST_DEMAND	8.2%	0.0%	0.6%	4.5%	1.6%	0.3%	0.0%	0.0%	0.0%	0.0%
	DIST_ENERGY										
	Total	100.0%	0.0%	6.3%	9.2%	1.7%	1.8%	0.1%	0.4%	0.1%	0.0%
Expense - Account 586 (OP - Meter)	TOTAL RETAIL	100.0%	0.0%	6.3%	9.4%	2.1%	7.3%	0.1%			2.6%
	DIST_CUST	72.3%	0.0%	6.3%	9.4%	2.1%	7.3%	0.1%			2.6%
	DIST_DEMAND	27.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0%
	DIST_ENERGY										
	Total	100.0%	0.0%	6.3%	9.4%	2.1%	7.3%	0.1%	0.0%	0.0%	2.6%

PENNSYLVANIA POWER COMPANY
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 COMPANY PREFERRED ALLOCATION METHOD
 ALLOCATION METHODS

METHOD	ACCOUNT	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
Expense - Account 588 (OP - Misc. Expense)	TOTAL RETAIL	74.8%	0.0%	4.6%	4.0%	0.2%	4.7%	0.0%	0.9%	2.7%	0.2%
	DIST_CUST	57.5%	0.0%	4.6%	4.0%	0.2%	4.7%	0.0%	0.9%	2.7%	0.2%
	DIST_DEMAND	13.1%	0.0%	1.0%	7.1%	2.6%	1.3%	0.0%	0.0%	0.1%	0.1%
	DIST_ENERGY										
	Total	100.0%	0.0%	5.6%	11.1%	2.8%	6.0%	0.1%	0.9%	2.8%	0.2%
Expense - Account 589 (Rents)	TOTAL RETAIL	74.9%	0.0%	4.6%	4.1%	0.2%	5.2%	0.0%	0.6%	2.5%	0.2%
	DIST_CUST	57.6%	0.0%	4.6%	4.1%	0.2%	5.2%	0.0%	0.6%	2.5%	0.2%
	DIST_DEMAND	13.0%	0.0%	1.0%	7.0%	2.6%	1.4%	0.0%	0.0%	0.1%	0.1%
	DIST_ENERGY										
	Total	100.0%	0.0%	5.6%	11.1%	2.8%	6.5%	0.1%	0.6%	2.5%	0.2%
Expense - Account 590 (MN - Supv. & Engineering)	TOTAL RETAIL	82.9%	0.0%	4.9%	4.1%	0.1%	11.6%	0.0%	0.3%	0.0%	0.0%
	DIST_CUST	61.7%	0.0%	4.9%	4.1%	0.1%	11.6%	0.0%	0.3%	0.0%	0.0%
	DIST_DEMAND	17.1%	0.0%	0.6%	4.5%	1.6%	1.9%	0.0%	0.0%	0.0%	0.0%
	DIST_ENERGY										
	Total	100.0%	0.0%	5.5%	8.6%	1.7%	13.5%	0.1%	0.4%	0.1%	0.0%
Expense - Account 591 (MN - Structures)	TOTAL RETAIL	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	DIST_CUST	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	DIST_DEMAND	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	DIST_ENERGY										
	Total	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Expense - Account 592 (MN - Station)	TOTAL RETAIL	100.0%	0.1%	3.8%	27.3%	9.9%	8.0%	0.1%	0.1%	0.3%	0.0%
	DIST_CUST	50.4%	0.1%	3.8%	27.3%	9.9%	8.0%	0.1%	0.1%	0.3%	0.0%
	DIST_DEMAND	50.4%	0.1%	3.8%	27.3%	9.9%	8.0%	0.1%	0.1%	0.3%	0.0%
	DIST_ENERGY										
	Total	100.0%	0.1%	3.8%	27.3%	9.9%	8.0%	0.1%	0.1%	0.3%	0.0%
Expense - Account 593 (MN - OH Conductors)	TOTAL RETAIL	89.9%	0.0%	5.3%	4.4%	0.1%	12.8%	0.0%	0.4%	0.0%	0.0%
	DIST_CUST	66.9%	0.0%	5.3%	4.4%	0.1%	12.8%	0.0%	0.4%	0.0%	0.0%
	DIST_DEMAND	10.1%	0.0%	0.4%	2.6%	0.9%	1.4%	0.0%	0.0%	0.0%	0.0%
	DIST_ENERGY										
	Total	100.0%	0.0%	5.6%	6.9%	1.0%	14.2%	0.1%	0.4%	0.1%	0.0%
Expense - Account 594 (MN - UG Conductors)	TOTAL RETAIL	84.7%	0.0%	5.7%	4.7%	0.1%	1.5%	0.0%	0.4%	0.0%	0.0%
	DIST_CUST	72.2%	0.0%	5.7%	4.7%	0.1%	1.5%	0.0%	0.4%	0.0%	0.0%
	DIST_DEMAND	15.3%	0.0%	0.6%	4.5%	1.6%	0.3%	0.0%	0.0%	0.0%	0.0%
	DIST_ENERGY										
	Total	100.0%	0.0%	6.3%	9.2%	1.7%	1.8%	0.1%	0.4%	0.1%	0.0%

**PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 ALLOCATION METHODS**

METHOD	DETAILED ACCOUNT										
	TOTAL RETAIL	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
Expense - Account 595 (MN - XFMRs)	60.1%	52.2%	0.0%	4.1%	3.4%	0.1%	0.0%	0.0%	0.3%	0.0%	0.0%
	39.9%	21.8%	0.0%	1.7%	11.8%	4.3%	0.0%	0.0%	0.1%	0.1%	0.1%
Total	100.0%	74.0%	0.0%	5.8%	15.2%	4.4%	0.0%	0.1%	0.4%	0.2%	0.0%
Expense - Account 596 (MN - Streetlights)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	100.0%	72.3%	0.0%	6.3%	9.4%	2.1%	7.3%	0.1%	0.0%	0.0%	2.6%
Total	100.0%	72.3%	0.0%	6.3%	9.4%	2.1%	7.3%	0.1%	0.0%	0.0%	2.6%
Expense - Account 597 (MN - Meters)	74.8%	57.5%	0.0%	4.6%	4.0%	0.2%	4.7%	0.0%	0.9%	2.7%	0.2%
	25.2%	13.1%	0.0%	1.0%	7.1%	2.6%	1.3%	0.0%	0.0%	0.1%	0.1%
Total	100.0%	70.6%	0.0%	5.6%	11.1%	2.8%	6.0%	0.1%	0.9%	2.8%	0.2%
Expense - Account 902 (Cust Acct Supervision)	100.0%	81.1%	0.1%	10.1%	8.3%	0.2%	0.1%	0.1%	0.0%	0.0%	0.0%
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	100.0%	81.1%	0.1%	10.1%	8.3%	0.2%	0.1%	0.1%	0.0%	0.0%	0.0%
Expense - Account 903 (Cust Acct Collections)	100.0%	86.7%	0.0%	6.8%	5.7%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	100.0%	86.7%	0.0%	6.8%	5.7%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%
Expense - Account 905 (Cust Acct Accounts)	100.0%	86.7%	0.0%	6.8%	5.7%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	100.0%	86.7%	0.0%	6.8%	5.7%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%

PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 ALLOCATION METHODS

METHOD	ACCOUNT	TOTAL RETAIL	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
Expense - Account 907 (Cust Info Supervision)	DIST_CUST	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	DIST_DEMAND											
	DIST_ENERGY											
	Total	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Expense - Account 908 (Cust Info Assistance)	DIST_CUST	100.0%	100.0%									
	DIST_DEMAND											
	DIST_ENERGY											
	Total	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Expense - Account 909 (Cust Info Advertising)	DIST_CUST	100.0%	86.8%	0.0%	6.8%	5.7%	0.1%		0.1%	0.5%	0.1%	
	DIST_DEMAND											
	DIST_ENERGY											
	Total	100.0%	86.8%	0.0%	6.8%	5.7%	0.1%	0.0%	0.1%	0.5%	0.1%	0.0%
Expense - Account 910 (Cust Info Misc. Expense)	DIST_CUST	100.0%	97.9%	0.0%	1.0%	0.8%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%
	DIST_DEMAND											
	DIST_ENERGY											
	Total	100.0%	97.9%	0.0%	1.0%	0.8%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%
Expense - Account 911 (Sales Supervision)	DIST_CUST	100.0%	86.7%	0.0%	6.8%	5.7%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%
	DIST_DEMAND											
	DIST_ENERGY											
	Total	100.0%	86.7%	0.0%	6.8%	5.7%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%
Expense - Account 913 (Advertising Expense)	DIST_CUST	100.0%	86.7%	0.0%	6.8%	5.7%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%
	DIST_DEMAND											
	DIST_ENERGY											
	Total	100.0%	86.7%	0.0%	6.8%	5.7%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%
Expense - Account 935 (A&G Maint. General Plant)	DIST_CUST	74.8%	57.5%	0.0%	4.6%	4.0%	0.2%	4.7%	0.0%	0.9%	2.7%	0.2%
	DIST_DEMAND	25.2%	13.1%	0.0%	1.0%	7.1%	2.6%	1.3%	0.0%	0.0%	0.1%	
	DIST_ENERGY											
	Total	100.0%	70.6%	0.0%	5.6%	11.1%	2.8%	6.0%	0.1%	0.9%	2.8%	0.2%

PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 ALLOCATION METHODS

METHOD	ACCOUNT	TOTAL RETAIL	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
Poles - Primary	DIST_CUST	0.1%						0.1%				
	DIST_DEMAND	99.9%						99.9%				
	DIST_ENERGY											
	Total	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
Poles - Secondary	DIST_CUST	15.8%	13.7%	0.0%	1.1%	0.9%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
	DIST_DEMAND	84.2%	46.1%	0.1%	3.5%	25.0%	9.1%	0.1%	0.1%	0.1%	0.3%	0.3%
	DIST_ENERGY											
	Total	100.0%	59.8%	0.1%	4.6%	25.9%	9.1%	0.0%	0.1%	0.2%	0.3%	0.0%
Transformers	DIST_CUST	15.8%	13.7%	0.0%	1.1%	0.9%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
	DIST_DEMAND	84.2%	46.1%	0.1%	3.5%	25.0%	9.1%	0.1%	0.1%	0.1%	0.3%	0.3%
	DIST_ENERGY											
	Total	100.0%	59.8%	0.1%	4.6%	25.9%	9.1%	0.0%	0.1%	0.2%	0.3%	0.0%
Trnsm Original Cost Plant	DIST_CUST	100.0%	50.4%	0.1%	3.8%	27.3%	9.9%	8.0%	0.1%	0.1%	0.3%	0.3%
	DIST_DEMAND											
	DIST_ENERGY											
	Total	100.0%	50.4%	0.1%	3.8%	27.3%	9.9%	8.0%	0.1%	0.1%	0.3%	0.0%
UG Conductors - Primary	DIST_CUST	0.1%						0.1%				
	DIST_DEMAND	99.9%						99.9%				
	DIST_ENERGY											
	Total	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
UG Conductors - Secondary	DIST_CUST	15.8%	13.7%	0.0%	1.1%	0.9%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
	DIST_DEMAND	84.2%	46.1%	0.1%	3.5%	25.0%	9.1%	0.1%	0.1%	0.1%	0.3%	0.3%
	DIST_ENERGY											
	Total	100.0%	59.8%	0.1%	4.6%	25.9%	9.1%	0.0%	0.1%	0.2%	0.3%	0.0%
UG Conduits - Primary	DIST_CUST	0.1%						0.1%				
	DIST_DEMAND	99.9%						99.9%				
	DIST_ENERGY											
	Total	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
UG Conduits - Secondary	DIST_CUST	15.8%	13.7%	0.0%	1.1%	0.9%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
	DIST_DEMAND	84.2%	46.1%	0.1%	3.5%	25.0%	9.1%	0.1%	0.1%	0.1%	0.3%	0.3%
	DIST_ENERGY											
	Total	100.0%	59.8%	0.1%	4.6%	25.9%	9.1%	0.0%	0.1%	0.2%	0.3%	0.0%
Uncollectibles	DIST_CUST	100.0%	86.7%	0.0%	6.8%	5.7%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%
	DIST_DEMAND											
	DIST_ENERGY											
	Total	100.0%	86.7%	0.0%	6.8%	5.7%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%

PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 ALLOCATION METHODS

METHOD	TOTAL RETAIL	RS	GSR	GSS	GSM	GSL	GP	PNP	POL	STLT	GT
DETAILED ACCOUNT											
DIST_DEMAND											
DIST_ENERGY											
Total	100.0%	86.7%	0.0%	6.8%	5.7%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%
Write-Offs											
DIST_CUST	100.0%	94.8%		2.6%	2.5%				0.0%		0.1%
DIST_DEMAND											
DIST_ENERGY											
Total	100.0%	94.8%	0.0%	2.6%	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%

**PENNSYLVANIA POWER COMPANY
COST OF SERVICE STUDY
OVERVIEW OF ACCOUNTS**

Type	Section	FERC Account	Account Description	Source of Total Dollars	Allocators Method	Method Description	Method Source
Rate Base	Depreciation Reserve	108_303	AD - Intangible	RAD 46 Att B p 3	Plant - Account 303 (Intangible Plant)	Allocation follows Original Cost Plant of 303 Account	Plant in Service
Rate Base	Depreciation Reserve	108_360	AD - Land	RAD 46 Att B p 3	D Original Cost Plant, 360 Accounts	Allocation follows Distribution Original Cost Plant, Accounts 361 to 369	Plant in Service
Rate Base	Depreciation Reserve	108_361	AD - Structures	RAD 46 Att B p 3	Plant - Account 361 (Structures)	Allocation follows Original Cost Plant of 361 Account	Plant in Service
Rate Base	Depreciation Reserve	108_362	AD - Station	RAD 46 Att B p 3	Plant - Account 362 (Station)	Allocation follows Original Cost Plant of 362 Account	Plant in Service
Rate Base	Depreciation Reserve	108_364	AD - Poles	RAD 46 Att B p 3	Plant - Account 364 (Poles)	Allocation follows Original Cost Plant of 364 Account	Plant in Service
Rate Base	Depreciation Reserve	108_365	AD - Conductors	RAD 46 Att B p 3	Plant - Account 365 (OH Conductors)	Allocation follows Original Cost Plant of 365 Account	Plant in Service
Rate Base	Depreciation Reserve	108_366	AD - Underground Conduit	RAD 46 Att B p 3	Plant - Account 366 (UG Conduits)	Allocation follows Original Cost Plant of 366 Account	Plant in Service
Rate Base	Depreciation Reserve	108_367	AD - Underground Conductors	RAD 46 Att B p 3	Plant - Account 367 (UG Conductors)	Allocation follows Original Cost Plant of 367 Account	Plant in Service
Rate Base	Depreciation Reserve	108_368	AD - XFMRs	RAD 46 Att B p 3	Plant - Account 368 (Transformers)	Allocation follows Original Cost Plant of 368 Account	Plant in Service
Rate Base	Depreciation Reserve	108_369	AD - Services	RAD 46 Att B p 3	Plant - Account 369 (Services)	Allocation follows Original Cost Plant of 369 Account	Plant in Service
Rate Base	Depreciation Reserve	108_370	AD - Meters	RAD 46 Att B p 3	Plant - Account 370 (Meters)	Allocation follows Original Cost Plant of 370 Account	Plant in Service
Rate Base	Depreciation Reserve	108_371	AD - Customer Premises	RAD 46 Att B p 3	Plant - Account 371 (Cust Premises)	Allocation follows Original Cost Plant of 371 Account	Plant in Service
Rate Base	Depreciation Reserve	108_372	AD - Leased Property Cust. Prem.	RAD 46 Att B p 3	Plant - Account 372 (Leased Property - Cust Prem.)	Allocation follows Original Cost Plant of 372 Account	Plant in Service
Rate Base	Depreciation Reserve	108_373	AD - Streetlights	RAD 46 Att B p 3	Plant - Account 373 (Streetlight)	Allocation follows Original Cost Plant of 373 Account	Plant in Service
Rate Base	Depreciation Reserve	108_389	AD - Land	RAD 46 Att B p 3	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service
Rate Base	Depreciation Reserve	108_390	AD - Structures	RAD 46 Att B p 3	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service
Rate Base	Depreciation Reserve	108_391	AD - Office Equipment	RAD 46 Att B p 3	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service
Rate Base	Depreciation Reserve	108_392	AD - Transportation	RAD 46 Att B p 3	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service
Rate Base	Depreciation Reserve	108_393	AD - Stores Equip.	RAD 46 Att B p 3	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service
Rate Base	Depreciation Reserve	108_394	AD - Tools & Garage Equip.	RAD 46 Att B p 3	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service
Rate Base	Depreciation Reserve	108_395	AD - Laboratory	RAD 46 Att B p 3	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service
Rate Base	Depreciation Reserve	108_396	AD - Power Equipment	RAD 46 Att B p 3	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service
Rate Base	Depreciation Reserve	108_397	AD - Communication Equip.	RAD 46 Att B p 3	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service
Rate Base	Depreciation Reserve	108_398	AD - Misc. Equipment	RAD 46 Att B p 3	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service
Rate Base	Rate Base Adjustments	235	Customer Deposits	RAD 01 Rate Base	Deposits	Customer Component, All Customers - Weighted for Deposits	TJD Exhibit 2, Study # 03
Rate Base	Rate Base Adjustments	252	Customer Advances	RAD 01 Rate Base	Customers - Residential	Allocates to customer charge, based on residential accounts	KMS Exhibit 2
Rate Base	Plant in Service	301	Organization	RAD 46 Attach B p 1-2	D & G Net Plant	Allocation follows Distribution and General Net Plant	Plant in Service / Depreciation Reserve
Rate Base	Plant in Service	302	Franchise and Consents	RAD 46 Attach B p 1-2	D & G Net Plant	Allocation follows Distribution and General Net Plant	Plant in Service / Depreciation Reserve
Rate Base	Plant in Service	303	Intangible Plant	RAD 46 Attach B p 1-2	Expense - Total Less A & G	Allocation follows Total O & M Expense, less A & G expenses	O & M

**PENNSYLVANIA POWER COMPANY
COST OF SERVICE STUDY
OVERVIEW OF ACCOUNTS**

Penn Power Exhibit TJD-1
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Type	Section	FERC Account	Account Description	Source of Total Dollars	Allocator Method	Method Description	Method Source
Rate Base	Plant in Service	360	P - Land	RAD 46 Attach B p 1-2	D Original Cost Plant, 360 Accounts	Allocation follows Distribution Original Cost Plant, Accounts 361 to 369	Plant in Service
Rate Base	Plant in Service	361	P - Structures	RAD 46 Attach B p 1-2	Demand - Non-Coincident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Rate Base	Plant in Service	362	P - Station	RAD 46 Attach B p 1-2	Demand - Non-Coincident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Rate Base	Plant in Service	364P	P - Primary Poles	RAD 46 Attach B p 1-2	Poles - Primary	Pole Plant Allocation (Primary) - Uses Minimum Grid and Primary / Secondary Study to assign customer and demand charges, then allocates customer charges to all customers based on count, and allocates demand charges based on the NCP	TJD Exhibit 2, Study # 07 / TJD Exhibit 2, Study # 01
Rate Base	Plant in Service	364S	P - Secondary Poles	RAD 46 Attach B p 1-2	Poles - Secondary	Pole Plant Allocation (Secondary) - Uses Minimum Grid and Primary / Secondary Study to assign customer and demand charges, then allocates customer charges to all customers based on count, and allocates demand charges based on the NCP	TJD Exhibit 2, Study # 07 / TJD Exhibit 2, Study # 01
Rate Base	Plant in Service	364Z	P - Streetlight Poles	RAD 46 Attach B p 1-2	Customers - STLT	Direct Assignment to STLT customer component	NA
Rate Base	Plant in Service	365P	P - OH Prim. Conductors	RAD 46 Attach B p 1-2	OH Conductors - Primary	Overhead Conductors Allocation (Primary) - Uses Minimum Grid and Primary / Secondary Study to assign customer and demand charges, then allocates customer charges to all customers based on count, and allocates demand charges based on the NCP	TJD Exhibit 2, Study # 07 / TJD Exhibit 2, Study # 01
Rate Base	Plant in Service	365S	P - OH Sec. Conductors	RAD 46 Attach B p 1-2	OH Conductors - Secondary	Overhead Conductors Allocation (Secondary) - Uses Minimum Grid and Primary / Secondary Study to assign customer and demand charges, then allocates customer charges to all customers based on the NCP	TJD Exhibit 2, Study # 07 / TJD Exhibit 2, Study # 01
Rate Base	Plant in Service	366P	P - U Prim. Conduit	RAD 46 Attach B p 1-2	UG Conduits - Primary	Underground Conduits Allocation (Primary) - Uses Primary / Secondary Study to assign primary portion, then allocates customer charges to all customers based on count, and allocates demand charges based on the NCP	TJD Exhibit 2, Study # 07 / TJD Exhibit 2, Study # 01
Rate Base	Plant in Service	366S	P - U Sec. Conduit	RAD 46 Attach B p 1-2	UG Conduits - Secondary	Underground Conduits Allocation (Secondary) - Uses Primary / Secondary Study to assign primary portion, then allocates customer charges to all customers based on count, and allocates demand charges based on the NCP	TJD Exhibit 2, Study # 07 / TJD Exhibit 2, Study # 01
Rate Base	Plant in Service	367P	P - U Prim. Conductors	RAD 46 Attach B p 1-2	UG Conductors - Primary	Underground Conductors Allocation (Primary) - Uses Minimum Grid and Primary / Secondary Study to assign customer and demand charges, then allocates customer charges to all customers based on count, and allocates demand charges based on the NCP	TJD Exhibit 2, Study # 07 / TJD Exhibit 2, Study # 01

**PENNSYLVANIA POWER COMPANY
COST OF SERVICE STUDY
OVERVIEW OF ACCOUNTS**

Type	Section	FERC Account	Account Description	Source of Total Dollars	Allocator Method	Method Description	Method Source
Rate Base	Plant in Service	3675	P - U Sec. Conductors	RAD 46 Attach B p 1-2 UG Conductors - Secondary	UG Conductors - Secondary	Underground Conductors Allocation (Secondary) - Uses Minimum Grid and Primary / Secondary Study to assign customer and demand charges, then allocates customer charges to all customers based on count, and allocates demand charges based on the NCP demand charges	TJD Exhibit 2, Study # 07 / TJD Exhibit 2, Study # 01
Rate Base	Plant in Service	368	P - XFMRs	RAD 46 Attach B p 1-2 Transformers	Transformers	Transformer Allocation - Uses Minimum Grid Study to assign customer and demand charges, then allocates customer charges to all customers based on count, and allocates demand charges based on the NCP	TJD Exhibit 2, Study # 07 / TJD Exhibit 2, Study # 01
Rate Base	Plant in Service	369	P - Services	RAD 46 Attach B p 1-2 Customers - Secondary	Customers - Secondary	Allocates to customer charge, based on secondary customer counts	KMS Exhibit 2
Rate Base	Plant in Service	370	P - Meters	RAD 46 Attach B p 1-2 Meter Plant	Meter Plant	Customer Component, All Customers - Weighted for Meter Plant Costs	TJD Exhibit 2, Study # 06
Rate Base	Plant in Service	371	P - Customer Premises	RAD 46 Attach B p 1-2 Customers - POL	Customers - POL	Direct Assignment to POL customer component	NA
Rate Base	Plant in Service	372	P - Leased Property Cust. Prem.	RAD 46 Attach B p 1-2 Customers - POL	Customers - POL	Direct Assignment to POL customer component	NA
Rate Base	Plant in Service	373	P - Streetlight	RAD 46 Attach B p 1-2 Customers - STLT	Customers - STLT	Direct Assignment to STLT customer component	NA
Rate Base	Plant in Service	389	P - Land	RAD 46 Attach B p 1-2 Dist Original Cost Plant	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service
Rate Base	Plant in Service	390	P - Structures	RAD 46 Attach B p 1-2 Dist Original Cost Plant	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service
Rate Base	Plant in Service	391	P - Office Equipment	RAD 46 Attach B p 1-2 Dist Original Cost Plant	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service
Rate Base	Plant in Service	392	P - Transportation	RAD 46 Attach B p 1-2 Dist Original Cost Plant	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service
Rate Base	Plant in Service	393	P - Stores Equipment	RAD 46 Attach B p 1-2 Dist Original Cost Plant	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service
Rate Base	Plant in Service	394	P - Tools & Garage Equip.	RAD 46 Attach B p 1-2 Dist Original Cost Plant	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service
Rate Base	Plant in Service	395	P - Laboratory	RAD 46 Attach B p 1-2 Dist Original Cost Plant	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service
Rate Base	Plant in Service	396	P - Power Equipment	RAD 46 Attach B p 1-2 Dist Original Cost Plant	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service
Rate Base	Plant in Service	397	P - Communication Equipment	RAD 46 Attach B p 1-2 Dist Original Cost Plant	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service
Rate Base	Plant in Service	398	P - Misc. Equipment	RAD 46 Attach B p 1-2 Dist Original Cost Plant	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service
Rate Base	Rate Base Adjustments	ADJ_RB_2	RB Adj. Plant Held for Future Use	RB Adj 2	D Original Cost Plant, 360 Accounts	Allocation follows Distribution Original Cost Plant, Accounts 361 to 369	Plant in Service
Rate Base	Rate Base Adjustments	ADJ_RB_C	Cash Working Capital	RB Adj 4 CWC	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service

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Type	Section	FERC Account	Account Description	Source of Total Dollars	Allocator Method	Method Description	Method Source
Rate Base	Rate Base Adjustments	ADJ_RB_M & S	RB Adj. M&S	RB Adj 5 M&S	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service
Rate Base	Rate Base Adjustments	ADJ_RB_St	RB Adj. Storm Damage Norm Normalization	RB Adj 7 Storm Norm	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service
Rate Base	Rate Base Adjustments	ADJ_RB_L	RB Adj. Adjustment for Retired Legacy Meters	RB Adj 6 Legacy Meters	Meter Plant	Customer Component, All Customers - Weighted for Meter Plant Costs	TJD Exhibit 2, Study # 06
Rate Base	Rate Base Adjustments	RB_DIT_LI	Deferred Tax - Liberalized Depreciation	RAD 01 Rate Base	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service
Rate Base	Rate Base Adjustments	RB_OP_RE	Operating Reserves	RB Adj 9	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service
Rate Base	Rate Base Adjustments	ADJ_RB_9	RB Adj. Operating Reserves	RB Adj 9	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service
Revenue	Revenue	450	OR - Forefeited Discount Revenue	Other Revenues 450-454	Forfeited Discounts	Customer Component, All Customers - Weighted for Forfeited Discounts	TJD Exhibit 2, Study # 04
Revenue	Revenue	450_Adj	OR - Forefeited Discount Revenue Adjustment	IS Adj 14 LPC	Forfeited Discounts	Customer Component, All Customers - Weighted for Forfeited Discounts	TJD Exhibit 2, Study # 04
Revenue	Revenue	451	OR - Misc. Service Revenues	Other Revenues 450-454	Customers - Secondary	Allocates to customer charge, based on secondary customer counts	KMS Exhibit 2
Revenue	Revenue	454POLE	OR - Pole Rent	Other Revenues 450-454	Plant - Account 364 (Poles)	Allocation follows Original Cost Plant of 364 Account	Plant in Service
Revenue	Revenue	454RENT	OR - Lease Rent	Other Revenues 450-454	Labor Expense - Total	Allocation follows Total Labor Expense	TJD Exhibit 2, Study # 05
Revenue	Revenue	456MISC	OR - Misc. Revenue	Other Revenues 456	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service
Revenue	Revenue	456AECNIT	OR - AEC wheeling NITS	Other Revenues 456	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service
Revenue	Revenue	456SCRAP	OR - NUG/TMI	Other Revenues 456	D Original Cost Plant, 360 Accounts	Allocation follows Distribution Original Cost Plant, Accounts 361 to 369	Plant in Service
Expense	O & M	580	OP - Supv. & Engineering	RAD 55 P&L Summary	D Original Cost Plant, 580 Accounts	Allocation follows Distribution Original Cost Plant, Accounts 581 to 589	O & M
Expense	O & M	581	OP - Dispatching	RAD 55 P&L Summary	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Expense	O & M	583	OP - Overhead Line	RAD 55 P&L Summary	D Original Cost Plant, 360 OH	Allocation follows Distribution Original Cost Plant, Account 365	Plant in Service
Expense	O & M	584	OP - Underground Line	RAD 55 P&L Summary	Plant - Account 367 (UG Conductors)	Allocation follows Original Cost Plant of 367 Account	Plant in Service
Expense	O & M	586	OP - Meter	RAD 55 P&L Summary	Plant - Account 370 (Meters)	Allocation follows Original Cost Plant of 370 Account	Plant in Service
Expense	O & M	588	OP - Misc. Expenses	RAD 55 P&L Summary	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service

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Type	Section	FERC Account	Account Description	Source of Total Dollars	Allocator Method	Method Description	Method Source
Expense	O & M	589	Rents	RAD 55 P&L Summary	D & G Net Plant	Allocation follows Distribution and General Net Plant	Plant in Service / Depreciation Reserve
Expense	O & M	590	MIN - Supv. & Engineering	RAD 55 P&L Summary	D Original Cost Plant, 590 Accounts	Allocation follows Distribution Original Cost Plant, Accounts 591 to 599	O & M
Expense	O & M	591	MIN - Structures	RAD 55 P&L Summary	Plant - Account 361 (Structures)	Allocation follows Original Cost Plant of 361 Account	Plant in Service
Expense	O & M	592	MIN - Station	RAD 55 P&L Summary	Plant - Account 362 (Station)	Allocation follows Original Cost Plant of 362 Account	Plant in Service
Expense	O & M	593	MIN - OH Concuctors	RAD 55 P&L Summary	Plant - Account 365 (OH Concuctors)	Allocation follows Original Cost Plant of 365 Account	Plant in Service
Expense	O & M	594	MIN - UG Concuctors	RAD 55 P&L Summary	Plant - Account 367 (UG Concuctors)	Allocation follows Original Cost Plant of 367 Account	Plant in Service
Expense	O & M	595	MIN - XFMRs	RAD 55 P&L Summary	Plant - Account 368 (Transformers)	Allocation follows Original Cost Plant of 368 Account	Plant in Service
Expense	O & M	596	MIN - Streetlights	RAD 55 P&L Summary	Plant - Account 373 (Streetlight)	Allocation follows Original Cost Plant of 373 Account	Plant in Service
Expense	O & M	597	MIN - Meters	RAD 55 P&L Summary	Plant - Account 370 (Meters)	Allocation follows Original Cost Plant of 370 Account	Plant in Service
Expense	O & M	598	MIN - Misc	RAD 55 P&L Summary	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service
Expense	O & M	902	Customer Account Supervision	RAD 55 P&L Summary	Meter Reading Expense	Customer Component, All Customers - Weighted for Meter Reading Expense	TJD Exhibit 2, Study # 04
Expense	O & M	903	Customer Account Collections	RAD 55 P&L Summary	Collections Expense	Customer Component, All Customers - Weighted for Collections Expenses	TJD Exhibit 2, Study # 04
Expense	O & M	904	Customer Account Uncollectables	RAD 55 P&L Summary	Write-Offs	Allocation follows customer write-offs	TJD Exhibit 2, Study # 11
Expense	O & M	905	Customer Account Accounts	RAD 55 P&L Summary	Customer Accounting Expenses	Customer Component, All Customers - Weighted for Misc. Customer Acctg Expenses	TJD Exhibit 2, Study # 04
Expense	O & M	907	Customer Info Supervision	RAD 55 P&L Summary	Customer Information Expenses	Customer Component, All Customers - Weighted for Information Assistance Expenses	TJD Exhibit 2, Study # 04
Expense	O & M	908	Customer Info Assistance Dist.	RAD 55 P&L Summary	Customer Information Assistance	Customer Component, All Customers - Weighted for Information Expenses	TJD Exhibit 2, Study # 04
Expense	O & M	909	Customer Info Advertising Dist.	RAD 55 P&L Summary	Customers - Secondary	Allocates to customer charge, based on secondary customer counts	KMS Exhibit 2
Expense	O & M	910	Customer Info Misc. Expense	RAD 55 P&L Summary	Customer Information Expenses	Customer Component, All Customers - Weighted for Information Assistance Expenses	TJD Exhibit 2, Study # 04
Expense	O & M	911	Sales Supervision	RAD 55 P&L Summary	Customers - Total	Allocates to customer charge, based on total customer counts	KMS Exhibit 2
Expense	O & M	913	Advertising expenses	RAD 55 P&L Summary	Customers - Total	Allocates to customer charge, based on total customer counts	KMS Exhibit 2
Expense	O & M	920	A&G Salaries	RAD 55 P&L Summary	Labor Expense - less A & G	Allocation follows Labor Expense, Less A&G Labor Expense	TJD Exhibit 2, Study # 05

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Type	Section	FERC Account	Account Description	Source of Total Dollars	Allocator Method	Method Description	Method Source
Expense	O & M	921	A&G Office Supplies	RAD 55 P&L Summary	Labor Expense - less A & G	Allocation follows Labor Expense, Less A&G Labor Expense	TID Exhibit 2, Study # 05
Expense	O & M	922	A&G Admin. Expenses	RAD 55 P&L Summary	Labor Expense - less A & G	Allocation follows Labor Expense, Less A&G Labor Expense	TID Exhibit 2, Study # 05
Expense	O & M	923	A&G Outside Services	RAD 55 P&L Summary	Labor Expense - less A & G	Allocation follows Labor Expense, Less A&G Labor Expense	TID Exhibit 2, Study # 05
Expense	O & M	924	A&G Property Insurance	RAD 55 P&L Summary	Dist Net Plant	Allocation follows Distribution Net Plant	Plant in Service / Depreciation Reserve
Expense	O & M	925	A&G Injury and Damages	RAD 55 P&L Summary	Labor Expense - Distribution	Allocation follows Distribution Labor Expense	TID Exhibit 2, Study # 05
Expense	O & M	926	A&G Pension and Benefits	RAD 55 P&L Summary	Labor Expense - less A & G	Allocation follows Labor Expense, Less A&G Labor Expense	TID Exhibit 2, Study # 05
Expense	O & M	930_1	A&G General Advertising	RAD 55 P&L Summary	Labor Expense - less A & G	Allocation follows Labor Expense, Less A&G Labor Expense	TID Exhibit 2, Study # 05
Expense	O & M	930_2	A&G Misc. Expense	RAD 55 P&L Summary	Labor Expense - less A & G	Allocation follows Labor Expense, Less A&G Labor Expense	TID Exhibit 2, Study # 05
Expense	O & M	931	A&G Misc. Rent	RAD 55 P&L Summary	Labor Expense - less A & G	Allocation follows Labor Expense, Less A&G Labor Expense	TID Exhibit 2, Study # 05
Expense	O & M	935	A&G Maint. Of General Plant	RAD 55 P&L Summary	Gen Original Cost Plant	General Plant, Original Cost	Plant in Service
Revenue	O & M	ADJ_IS_Late_Paymen t	IS Adj. Late Payment Charge	IS Adj 4 Late Payment	Forfeited Discounts	Customer Component, All Customers - Weighted for Forfeited Discounts	TID Exhibit 2, Study # 04
Expense	O & M	ADJ_IS_Dis t_Payroll	IS Adj. Distribution Payroll	IS Adj 5 Dist Expense	Labor Expense - Distribution	Allocation follows Distribution Labor Expense	TID Exhibit 2, Study # 05
Expense	O & M	ADJ_IS_Re quired_D ebt	IS Adj. Distribution Required Debt	IS Adj 5 Dist Expense	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service
Expense	O & M	ADJ_IS_Cu st_Acct_Pa yroll	IS Adj. Customer Accounts Payroll	IS Adj 6 Cust Accounts	Labor Expense - Customer Accounts	Allocation follows Customer Accounts Labor Expense	TID Exhibit 2, Study # 05
Expense	O & M	ADJ_IS_Cu st_Acct_D eposits	IS Adj. Customer Accounts Deposits	IS Adj 6 Cust Accounts	Deposits	Customer Component, All Customers - Weighted for Deposits	TID Exhibit 2, Study # 03
Expense	O & M	ADJ_IS_5c	IS Adj. Customer Accounts Uncollectables	IS Adj 5 Sched 1	Write-Offs	Allocation follows customer write-offs	TID Exhibit 2, Study # 11
Expense	O & M	ADJ_IS_Nu mber_of_ Custs	IS Adj. Customer Accounts No. of Cust.	IS Adj 6 Cust Accounts	Customers - Total	Allocates to customer charge, based on total customer counts	KMS Exhibit 2
Expense	O & M	ADJ_IS_Cu st_Serv_Pa yroll	IS Adj. Customer Service Payroll	IS Adj 7 Cust Serv & Info	Labor Expense - Customer Information	Allocation follows Customer Information Labor Expense	TID Exhibit 2, Study # 05

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Expense	O & M	ADJ_IS_Cash_Pension	IS Adj. Cash Pension	IS Adj 8 A&G	Labor Expense - less A & G	Allocation follows Labor Expense, Less A&G Labor Expense	TJD Exhibit 2, Study # 05
Expense	O & M	ADJ_IS_Employee_Benefits_Costs	IS Adj. Other Employee Benefit Costs	IS Adj 8 A&G	Labor Expense - less A & G	Allocation follows Labor Expense, Less A&G Labor Expense	TJD Exhibit 2, Study # 05
Expense	O & M	ADJ_IS_A&G_Non-Juris_Expense	IS Adj. A&G Non-Juris. Expense	IS Adj 8 A&G	Labor Expense - less A & G	Allocation follows Labor Expense, Less A&G Labor Expense	TJD Exhibit 2, Study # 05
Expense	O & M	ADJ_IS_A&G_Rate_Case_Expense	IS Adj. A&G Rate Case Expense	IS Adj 8 A&G	Labor Expense - less A & G	Allocation follows Labor Expense, Less A&G Labor Expense	TJD Exhibit 2, Study # 05
Expense	O & M	ADJ_IS_A&G_Legacy_Meters	IS Adj. A&G Legacy Meters	IS Adj 8 A&G	Meter Plant	Customer Component, All Customers - Weighted for Meter Plant Costs	TJD Exhibit 2, Study # 06
Expense	O & M	ADJ_IS_Accelerated_Switching	IS Adj. Accelerated Switching	IS Adj 8 A&G	Expense - Total A & G Less Adj.	Allocation follows Total O & M Expense, less adjustments to O & M	O & M
Other Expense	Depreciation	ADJ_IS_Cost_of_Removal_Salvage	IS Adj - Cost of Removal/Salvage	IS Adj 9 Depr Expense	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service
Other Expense	Depreciation	ADJ_IS_Average_net_Salvage	IS Adj - Average net Salvage	IS Adj 9 Depr Expense	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service
Other Expense	Depreciation	ADJ_IS_Accelerated_Depreciation_Meters	IS Adj - DE Accelerated Depreciation Meters	IS Adj 9 Depr Expense	Meter Plant	Customer Component, All Customers - Weighted for Meter Plant Costs	TJD Exhibit 2, Study # 06
Other Expense	Depreciation	ADJ_IS_Amortization_Expense	IS Adj - Amortization Expense	IS Adj 10 Amort Exp	Meter Plant	Customer Component, All Customers - Weighted for Meter Plant Costs	TJD Exhibit 2, Study # 06
Other Expense	General Taxes	ADJ_IS_Payroll_Tax	IS Adj. Payroll Tax	IS Adj 11 Taxes OTI	Labor Expense - Total	Allocation follows Total Labor Expense	TJD Exhibit 2, Study # 05
Other Expense	General Taxes	ADJ_IS_Other_Tax	IS Adj. Other Tax	IS Adj 11 Taxes OTI	D & G Original Cost Plant	Allocation follows Distribution and General Original Cost Plant	Plant in Service
Other Expense	Depreciation	403_303	DE - Intangible	RAD 53 Attach A	Plant - Account 303 (Intangible Plant)	Allocation follows Original Cost Plant of 303 Account	Plant in Service
Other Expense	Depreciation	403_360	DE - Land	RAD 53 Attach A	Plant - Account 360 (Land)	Allocation follows Original Cost Plant of 360 Account	Plant in Service
Other Expense	Depreciation	403_361	DE - Structures	RAD 53 Attach A	Plant - Account 361 (Structures)	Allocation follows Original Cost Plant of 361 Account	Plant in Service
Other Expense	Depreciation	403_362	DE - Station	RAD 53 Attach A	Plant - Account 362 (Station)	Allocation follows Original Cost Plant of 362 Account	Plant in Service
Other Expense	Depreciation	403_364	DE - Poles	RAD 53 Attach A	Plant - Account 364 (Poles)	Allocation follows Original Cost Plant of 364 Account	Plant in Service

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Type	Section	FERC Account	Account Description	Source of Total Dollars	Allocator Method	Method Description	Method Source
Other Expense	Depreciation	403_365	DE - OH Conductors	RAD 53 Attach A	Plant - Account 365 (OH Conductors)	Allocation follows Original Cost Plant of 365 Account	Plant in Service
Other Expense	Depreciation	403_366	DE - Underground Conduit	RAD 53 Attach A	Plant - Account 366 (UG Conduits)	Allocation follows Original Cost Plant of 366 Account	Plant in Service
Other Expense	Depreciation	403_367	DE - Underground Conductors	RAD 53 Attach A	Plant - Account 367 (UG Conductors)	Allocation follows Original Cost Plant of 367 Account	Plant in Service
Other Expense	Depreciation	403_368	DE - XFMRs	RAD 53 Attach A	Plant - Account 368 (Transformers)	Allocation follows Original Cost Plant of 368 Account	Plant in Service
Other Expense	Depreciation	403_369	DE - Services	RAD 53 Attach A	Plant - Account 369 (Services)	Allocation follows Original Cost Plant of 369 Account	Plant in Service
Other Expense	Depreciation	403_370	DE - Meters	RAD 53 Attach A	Plant - Account 370 (Meters)	Allocation follows Original Cost Plant of 370 Account	Plant in Service
Other Expense	Depreciation	403_371	DE - Customer Premises	RAD 53 Attach A	Plant - Account 371 (Cust Premises)	Allocation follows Original Cost Plant of 371 Account	Plant in Service
Other Expense	Depreciation	403_372	DE - Leased Property Cust. Prem.	RAD 53 Attach A	Plant - Account 372 (Leased Property - Cust Prem.)	Allocation follows Original Cost Plant of 372 Account	Plant in Service
Other Expense	Depreciation	403_373	DE - Streetlight	RAD 53 Attach A	Plant - Account 373 (Streetlight)	Allocation follows Original Cost Plant of 373 Account	Plant in Service
Other Expense	Depreciation	403_389	DE - Land	RAD 53 Attach A	Plant - Account 389 (Land - Misc)	Allocation follows Original Cost Plant of 389 Account	Plant in Service
Other Expense	Depreciation	403_390	DE - Structures	RAD 53 Attach A	Plant - Account 390 (Structures - Misc)	Allocation follows Original Cost Plant of 390 Account	Plant in Service
Other Expense	Depreciation	403_391	DE - Office Equipment	RAD 53 Attach A	Plant - Account 391 (Office Equipment)	Allocation follows Original Cost Plant of 391 Account	Plant in Service
Other Expense	Depreciation	403_392	DE - Transportation	RAD 53 Attach A	Plant - Account 392 (Transportation)	Allocation follows Original Cost Plant of 392 Account	Plant in Service
Other Expense	Depreciation	403_393	DE - Stores Equipment	RAD 53 Attach A	Plant - Account 393 (Stores)	Allocation follows Original Cost Plant of 393 Account	Plant in Service
Other Expense	Depreciation	403_394	DE - Tools & Garage Equip.	RAD 53 Attach A	Plant - Account 394 (Tools & Garage Equipment)	Allocation follows Original Cost Plant of 394 Account	Plant in Service
Other Expense	Depreciation	403_395	DE - Laboratory	RAD 53 Attach A	Plant - Account 395 (Laboratory)	Allocation follows Original Cost Plant of 395 Account	Plant in Service
Other Expense	Depreciation	403_396	DE - Power Equipment	RAD 53 Attach A	Plant - Account 396 (Power Equipment)	Allocation follows Original Cost Plant of 396 Account	Plant in Service
Other Expense	Depreciation	403_397	DE - Communications Equipment	RAD 53 Attach A	Plant - Account 397 (Communications Equipment)	Allocation follows Original Cost Plant of 397 Account	Plant in Service
Other Expense	Depreciation	403_398	DE - Misc. Equipment	RAD 53 Attach A	Plant - Account 398 (Misc. Equipment)	Allocation follows Original Cost Plant of 398 Account	Plant in Service
Other Expense	Depreciation	404-5	Amortization and depletion of utility plant	RAD 55 P&L Summary	D & G Original Cost Plant	Allocation follows Distribution and General Original Cost Plant	Plant in Service
Other Expense	Depreciation	407_Dist	Amortization - Rate Case Expense	Amortization UIP	Customers - Total	Allocates to customer charge, based on total customer counts	KMS Exhibit 2

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Type	Section	FERC Account	Account Description	Source of Total Dollars	Allocators Method	Method Description	Method Source
Other Expense	Depreciation	407_STORI	Amortization - Storm Reserve	Amortization UIP	Dist Net Plant	Allocation follows Distribution Net Plant	Plant in Service / Depreciation Reserve
Other Expense	Depreciation	407_SMT	Amortization - Smart Meter	Amortization UIP	Meter Plant	Customer Component, All Customers - Weighted for Meter Plant Costs	TJD Exhibit 2, Study # 06
Other Expense	Depreciation	407_SMIP	Amortization - SMIP Legacy Meters	Amortization UIP	Meter Plant	Customer Component, All Customers - Weighted for Meter Plant Costs	TJD Exhibit 2, Study # 06
Other Expense	Depreciation	407_WAV	Amortization - Waverly	Amortization UIP	Direct Assignment - Waverly	Direct Assignment to Waverly customer component	NA
Other Expense	General Taxes	408_1LND	OT - Property Tax	RAD 32 Tax OTI	D & G Original Cost Plant	Allocation follows Distribution and General Original Cost Plant	Plant in Service
Other Expense	General Taxes	408_1PAY	OT - Payroll Tax	RAD 32 Tax OTI	Labor Expense - Total	Allocation follows Total Labor Expense	TJD Exhibit 2, Study # 05
Other Expense	General Taxes	408_1CAP	OT - Capital Stock Tax	RAD 32 Tax OTI	D & G Original Cost Plant	Allocation follows Distribution and General Original Cost Plant	Plant in Service
Other Expense	General Taxes	408_1MIS	OT - Misc. Tax	RAD 32 Tax OTI	D & G Original Cost Plant	Allocation follows Distribution and General Original Cost Plant	Plant in Service
Labor	Labor	580L	OP - Supv. & Engineering Labor	Labor Input	Expense - Account 580 (OP - Supv. & Engineering)	Allocation follows O & M Expense of 580 Account	O & M
Labor	Labor	581L	OP - Dispatching Labor	Labor Input	Expense - Account 581 (OP - Dispatching)	Allocation follows O & M Expense of 581 Account	O & M
Labor	Labor	582L	OP - Distribution Station Labor	Labor Input	Plant - Account 362 (Station)	Allocation follows Original Cost Plant of 362 Account	Plant in Service
Labor	Labor	583L	OP - Overhead Line Labor	Labor Input	Expense - Account 583 (OP - Overhead Line)	Allocation follows O & M Expense of 583 Account	O & M
Labor	Labor	584L	OP - Underground Line Labor	Labor Input	Expense - Account 584 (OP - Underground Line)	Allocation follows O & M Expense of 584 Account	O & M
Labor	Labor	586L	OP - Meter Labor	Labor Input	Expense - Account 586 (OP - Meter)	Allocation follows O & M Expense of 586 Account	O & M
Labor	Labor	588L	OP - Misc. Expenses	Labor Input	Expense - Account 588 (OP - Misc. Expense)	Allocation follows O & M Expense of 588 Account	O & M
Labor	Labor	589L	Rents Labor	Labor Input	Expense - Account 589 (Rents)	Allocation follows O & M Expense of 589 Account	O & M
Labor	Labor	590L	MN - Supv. & Engineering Labor	Labor Input	Expense - Account 590 (MN - Supv. & Engineering)	Allocation follows O & M Expense of 590 Account	O & M
Labor	Labor	591L	MN - Structures Labor	Labor Input	Expense - Account 591 (MN - Structures)	Allocation follows O & M Expense of 591 Account	O & M
Labor	Labor	592L	MN - Station Labor	Labor Input	Expense - Account 592 (MN - Station)	Allocation follows O & M Expense of 592 Account	O & M
Labor	Labor	593L	MN - OH Conductors Labor	Labor Input	Expense - Account 593 (MN - OH Conductors)	Allocation follows O & M Expense of 593 Account	O & M
Labor	Labor	594L	MN - UG Conductors Labor	Labor Input	Expense - Account 594 (MN - UG Conductors)	Allocation follows O & M Expense of 594 Account	O & M
Labor	Labor	595L	MN - XFMRs Labor	Labor Input	Expense - Account 595 (MN - XFMRs)	Allocation follows O & M Expense of 595 Account	O & M

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Type	Section	FERC Account	Account Description	Source of Total Dollars	Allocated Method	Method Description	Method Source
Labor	Labor	596L	MN - Streetlights Labor	Labor Input	Expense - Account 596 (MN - Streetlights)	Allocation follows O & M Expense of 596 Account	O & M
Labor	Labor	597L	MN - Meters Labor	Labor Input	Expense - Account 597 (MN - Meters)	Allocation follows O & M Expense of 597 Account	O & M
Labor	Labor	598L	MN - Misc Labor	Labor Input	Expense - Account 598 (MN - Misc)	Allocation follows O & M Expense of 597 Account	O & M
Labor	Labor	902L	Customer Account Supervision - Labor	Labor Input	Expense - Account 902 (Cust Acct Supervision)	Allocation follows O & M Expense of 902 Account	O & M
Labor	Labor	903L	Customer Account Collections - Labor	Labor Input	Expense - Account 903 (Cust Acct Collections)	Allocation follows O & M Expense of 903 Account	O & M
Labor	Labor	905L	Customer Account Accounts - Labor	Labor Input	Expense - Account 905 (Cust Acct Accounts)	Allocation follows O & M Expense of 905 Account	O & M
Labor	Labor	907L	Customer Info Supervision Labor	Labor Input	Expense - Account 907 (Cust Info Supervision)	Allocation follows O & M Expense of 907 Account	O & M
Labor	Labor	908L	Customer Info Assistance Labor	Labor Input	Expense - Account 908 (Cust Info Assistance)	Allocation follows O & M Expense of 908 Account	O & M
Labor	Labor	909L	Customer Info Advertising Labor	Labor Input	Expense - Account 909 (Cust Info Advertising)	Allocation follows O & M Expense of 909 Account	O & M
Labor	Labor	910L	Customer Info Misc. Expense Labor	Labor Input	Expense - Account 910 (Cust Info Misc. Expense)	Allocation follows O & M Expense of 910 Account	O & M
Labor	Labor	911L	Sales Supervision Labor	Labor Input	Expense - Account 911 (Sales Supervision)	Allocation follows O & M Expense of 911 Account	O & M
Labor	Labor	913L	Advertising Labor	Labor Input	Expense - Account 913 (Advertising Expense)	Allocation follows O & M Expense of 913 Account	O & M
Labor	Labor	920L	A&G Salaries Labor	Labor Input	Labor Expense - less A & G	Allocation follows Labor Expense, Less A&G Labor Expense	TJD Exhibit 2, Study # 05
Labor	Labor	921L	A&G Office Supplies Labor	Labor Input	Labor Expense - less A & G	Allocation follows Labor Expense, Less A&G Labor Expense	TJD Exhibit 2, Study # 05
Labor	Labor	922L	A&G Admin. Expenses Labor	Labor Input	Labor Expense - less A & G	Allocation follows Labor Expense, Less A&G Labor Expense	TJD Exhibit 2, Study # 05
Labor	Labor	923L	A&G Outside Services Labor	Labor Input	Labor Expense - less A & G	Allocation follows Labor Expense, Less A&G Labor Expense	TJD Exhibit 2, Study # 05
Labor	Labor	924L	A&G Property Insurance Labor	Labor Input	Dist Net Plant	Allocation follows Distribution Net Plant	Plant in Service / Depreciation Reserve
Labor	Labor	925L	A&G Injury and Damages Labor	Labor Input	Labor Expense - Distribution	Allocation follows Distribution Labor Expense	TJD Exhibit 2, Study # 05
Labor	Labor	926L	A&G Pension and Benefits Labor	Labor Input	Labor Expense - less A & G	Allocation follows Labor Expense, Less A&G Labor Expense	TJD Exhibit 2, Study # 05
Labor	Labor	930_1L	A&G General Advertising Labor	Labor Input	Labor Expense - less A & G	Allocation follows Labor Expense, Less A&G Labor Expense	TJD Exhibit 2, Study # 05
Labor	Labor	930_2L	A&G Misc. Expense Labor	Labor Input	Labor Expense - less A & G	Allocation follows Labor Expense, Less A&G Labor Expense	TJD Exhibit 2, Study # 05
Labor	Labor	931L	A&G Rent Labor	Labor Input	Labor Expense - less A & G	Allocation follows Labor Expense, Less A&G Labor Expense	TJD Exhibit 2, Study # 05
Labor	Labor	935L	A&G Maint. Of General Plant Labor	Labor Input	Expense - Account 935 (A&G Maint. General Plant)	Allocation follows O & M Expense of 935 Account	O & M

**PENNSYLVANIA POWER COMPANY
COST OF SERVICE STUDY
OVERVIEW OF ACCOUNTS**

Type	Section	FERC Account	Account Description	Source of Total Dollars	Allocator Method	Method Description	Method Source
Expense	O & M	ADJ_IS_7e	IS Adj. A&G Legacy Meters	IS Adj 8 A&G	Meter Plant	Customer Component, All Customers - Weighted for Meter Plant Costs	TJD Exhibit 2, Study # 06
Expense	O & M	928	Regulatory Commission Expense	RAD 55 P&L Summary	Labor Expense - less A & G	Allocation follows Labor Expense, Less A&G Labor Expense	TJD Exhibit 2, Study # 05
Other Expense	Depreciation	411_1	Accretion expense	RAD 55 P&L Summary	Labor Expense - less A & G	Allocation follows Labor Expense, Less A&G Labor Expense	TJD Exhibit 2, Study # 05
Rate Base	Depreciation Reserve	108_302	AD - Franchise & Consents	RAD 46 Att B p 3	Plant - Account 302 (Intangible Plant)	Allocation follows Original Cost Plant of 302 Account	Plant in Service
Rate Base	Plant in Service	350	P - Land (TRN)	RAD 46 Attach B p 1-2	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Rate Base	Plant in Service	352	P - Structures	RAD 46 Attach B p 1-2	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Rate Base	Plant in Service	353	P - Station Equipment	RAD 46 Attach B p 1-2	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Rate Base	Plant in Service	354	P - Towers And Fixtures	RAD 46 Attach B p 1-2	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Rate Base	Plant in Service	355	P - Poles And Fixtures	RAD 46 Attach B p 1-2	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Rate Base	Plant in Service	356	P - Overhd Conductr, Devices	RAD 46 Attach B p 1-2	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Rate Base	Plant in Service	357	P - Underground Conduit	RAD 46 Attach B p 1-2	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Rate Base	Plant in Service	358	P - Undergrnd Conductr, Devices	RAD 46 Attach B p 1-2	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Rate Base	Plant in Service	359	P - Roads And Trails	RAD 46 Attach B p 1-2	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Rate Base	Depreciation Reserve	108_350	AD - Land (TRN)	RAD 46 Att B p 3	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Rate Base	Depreciation Reserve	108_352	AD - Structures	RAD 46 Att B p 3	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Rate Base	Depreciation Reserve	108_353	AD - Station Equipment	RAD 46 Att B p 3	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Rate Base	Depreciation Reserve	108_354	AD - Towers And Fixtures	RAD 46 Att B p 3	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Rate Base	Depreciation Reserve	108_355	AD - Poles And Fixtures	RAD 46 Att B p 3	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Rate Base	Depreciation Reserve	108_356	AD - Overhd Conductr, Devices	RAD 46 Att B p 3	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Rate Base	Depreciation Reserve	108_357	AD - Underground Conduit	RAD 46 Att B p 3	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Rate Base	Depreciation Reserve	108_358	AD - Undergrnd Conductr, Devices	RAD 46 Att B p 3	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Rate Base	Depreciation Reserve	108_359	AD - Roads And Trails	RAD 46 Att B p 3	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Other Expense	Depreciation	403_350	DE - Land (TRN)	RAD 53 Attach A	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Other Expense	Depreciation	403_352	DE - Structures	RAD 53 Attach A	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01

**PENNSYLVANIA POWER COMPANY
COST OF SERVICE STUDY
OVERVIEW OF ACCOUNTS**

Penn Power Exhibit TJD-1
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Type	Section	FERC Account	Account Description	Source of Total Dollars	Allocator Method	Method Description	Method Source
Other Expense	Depreciation	403_353	DE - Station Equipment	RAD 53 Attach A	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Other Expense	Depreciation	403_354	DE - Towers And Fixtures	RAD 53 Attach A	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Other Expense	Depreciation	403_355	DE - Poles And Fixtures	RAD 53 Attach A	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Other Expense	Depreciation	403_356	DE - Overhd Conductr, Devices	RAD 53 Attach A	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Other Expense	Depreciation	403_357	DE - Underground Conduit	RAD 53 Attach A	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Other Expense	Depreciation	403_358	DE - Undergrnd Conductr, Devices	RAD 53 Attach A	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Other Expense	Depreciation	403_359	DE - Roads And Trails	RAD 53 Attach A	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Rate Base	Depreciation Reserve	RWIP_Dist	Retirement Work in Progress - Distribution	RAD 46 Att B p 3	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service
Rate Base	Depreciation Reserve	RWIP_Trns	Retirement Work in Progress - Transmission	RAD 46 Att B p 3	Trnsm Original Cost Plant	Allocation Follows Transmission Original Cost Plant	Plant in Service
Rate Base	Depreciation Reserve	RWIP_Gen	Retirement Work in Progress - General	RAD 46 Att B p 3	Gen Original Cost Plant	General Plant, Original Cost	Plant in Service
Expense	O & M	IS_BTL	Balancing Transmission Losses in PTC	Transmission in PTC	Trnsm Original Cost Plant	Allocation Follows Transmission Original Cost Plant	Plant in Service
Expense	O & M	560	OP - Operation supervision and engineering	RAD 55 P&L Summary	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Expense	O & M	561	OP - Load Dispatch	RAD 55 P&L Summary	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Expense	O & M	565	OP - Transmission of electricity by others	RAD 55 P&L Summary	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Expense	O & M	566	OP - Miscellaneous transmission expenses	RAD 55 P&L Summary	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Expense	O & M	568	MN - Maintenance supervision and engineering	RAD 55 P&L Summary	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Expense	O & M	569	MN - Maintenance of structures	RAD 55 P&L Summary	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Expense	O & M	570	MN - Maintenance of station equipment	RAD 55 P&L Summary	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Expense	O & M	571	MN - Maintenance of overhead lines	RAD 55 P&L Summary	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Expense	O & M	573	MN - Maintenance of miscellaneous transmission	RAD 55 P&L Summary	Demand - Non-Concident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01

PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY
 OVERVIEW OF ACCOUNTS

Penn Power Exhibit TJD-1
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Type	Section	FERC Account	Account Description	Source of Total Dollars	Allocator Method	Method Description	Method Source
Expense	O & M	575	Operation-regional market expense	RAD 55 P&L Summary	Demand - Non-Coincident Peak	Non-Coincident Peak Contribution to Zonal Peak (INCP)	TJD Exhibit 2, Study # 01
Tax	Revenue Worksheet	TAX_Cost_of Removal	Tax Deductions - Cost of Removal	IS Adj 12 Fed & State Taxes	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service
Tax	Revenue Worksheet	TAX_PENSI ON	Tax Deductions - Pension	IS Adj 12 Fed & State Taxes	Labor Expense - Total	Allocation follows Total Labor Expense	TJD Exhibit 2, Study # 05
Tax	Revenue Worksheet	TAX_Legac Y_Meters	Tax Deductions - Legacy Meters	IS Adj 12 Fed & State Taxes	Meter Plant	Customer Component, All Customers - Weighted for Meter Plant Costs	TJD Exhibit 2, Study # 06
Tax	Revenue Worksheet	TAX_DEPR	Tax Deductions - Depreciation	IS Adj 12 Fed & State Taxes	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service
Tax	Revenue Worksheet	TAX_BON	Tax Deductions - Bonus	IS Adj 12 Fed & State Taxes	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service
Tax	Income Tax	TAX_DEPR	Depreciation	IS Adj 12 Fed & State Taxes	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service / Depreciation Reserve
Tax	Income Tax	TAX_DIT_S	Deferred Income Tax - State	RAD 02	D & G Net Plant	Allocation follows Distribution and General Net Plant	Plant in Service / Depreciation Reserve
Tax	Income Tax	TAX_DIT_F	Deferred Income Tax - Federal	RAD 02	D & G Net Plant	Allocation follows Distribution and General Net Plant	Plant in Service / Depreciation Reserve
Tax	Revenue Worksheet	TAX_ITC	Investment Tax Credit	RAD 02	D & G Net Plant	Allocation follows Distribution and General Net Plant	Plant in Service
Tax	Revenue Worksheet	TAX_ANS	Tax Deductions - Average net Salvage	IS Adj 9 Depr Expense	Dist Original Cost Plant	Allocation Follows Distribution Original Cost Plant	Plant in Service / Depreciation Reserve
Tax	Income Tax	410_1	Deferred Income Tax	RAD 18 - Comparative P&L	D & G Net Plant	Allocation follows Distribution and General Net Plant	Plant in Service / Depreciation Reserve
Tax	Income Tax	411_10	Investment Tax Credit	RAD 18 - Comparative P&L	D & G Net Plant	Allocation follows Distribution and General Net Plant	Plant in Service / Depreciation Reserve

PENNSYLVANIA POWER COMPANY
COST OF SERVICE STUDY - TOTAL SUMMARY
FULLY FUTURE TEST YEAR
COMPANY PREFERRED ALLOCATION METHOD
PRESENT RATES, \$1,000s

	TOTAL RETAIL	RS	GSR	GSS	GSM	GSL	GP	OH	PMP	POL	STLT	GT
RATE BASE												
Plant in Service	698,940	492,365	301	38,442	79,055	19,952	42,491	-	448	6,211	18,641	1,034
Depreciation Reserve	199,862	140,591	86	10,844	22,917	5,860	9,700	-	128	3,308	6,259	168
Net Plant	499,078	351,774	215	27,598	56,138	14,092	32,791	-	320	2,903	12,382	866
Rate Base Additions	39,084	27,686	17	2,210	4,253	1,044	2,413	-	25	309	934	192
Rate Base Deductions	124,643	87,106	54	6,873	14,965	3,479	7,281	-	82	1,098	3,321	384
Rate Base Other Total	(85,560)	(59,419)	(37)	(4,663)	(10,712)	(2,435)	(4,867)	-	(57)	(790)	(2,387)	(192)
Rate Base Total	413,519	292,355	178	22,935	45,426	11,657	27,923	-	264	2,113	9,995	673

INCOME STATEMENT

Revenue												
Tariff Revenue Total	131,230	94,908	86	6,124	15,421	5,103	5,893	-	94	551	1,087	1,963
Other Revenue Total	3,314	2,716	1	203	217	23	129	-	2	14	7	2
Retail Total	134,544	97,623	87	6,328	15,639	5,126	6,021	-	96	565	1,094	1,966

Expenses

Total Operation & Maintenance Expense	36,806	28,725	13	1,821	2,622	465	2,871	-	18	120	115	35
Depreciation Expense	24,387	17,004	11	1,357	2,808	717	1,490	-	16	199	707	78
Other Expenses Amortization Expense Total	1,700	1,228	1	106	160	36	124	-	1	0	0	43
Taxes Other than Income Taxes Excl GRT	853	634	0	46	77	17	60	-	0	5	11	1
Gross Receipts Tax	7,743	5,500	5	361	910	301	348	-	6	33	64	116
Total Operating Expense	71,489	53,191	30	3,692	6,578	1,537	4,893	-	41	357	897	273

Income Before Taxes

Income Before Taxes	63,056	44,433	57	2,636	9,061	3,590	1,128	-	55	208	196	1,693
Income taxes												
Current State Income Tax	5,998	4,239	6	248	864	346	91	-	5	20	7	173
Current Federal Income Tax	14,744	10,423	16	549	2,261	976	36	-	14	26	(95)	538
Provision for Deferred Income Taxes	6,351	4,484	3	353	706	175	415	-	4	37	161	11
Investment Tax Credit Adjustments	-	-	-	-	-	-	-	-	-	-	-	-
Total Income Tax	27,092	19,147	24	1,150	3,851	1,497	543	-	23	84	73	721
Net Income After Tax	35,964	25,286	33	1,486	5,230	2,093	586	-	32	124	124	971

Rate of Return

Rate of Return	8.70%	8.65%	18.51%	6.48%	11.51%	17.95%	2.10%	11.99%	5.87%	1.24%	144.29%
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**PENNSYLVANIA POWER COMPANY
 COST OF SERVICE STUDY - TOTAL SUMMARY
 FULLY FUTURE TEST YEAR
 COMPANY PREFERRED ALLOCATION METHOD
 PRESENT RATES, \$1,000s**

	RS	GSR	GSS	GSM	GSL	GP	OH	PNP	POL	STLT	GT	
TOTAL RETAIL												
Plant in Service	698,940	492,365	301	38,442	79,055	19,952	42,491	-	448	6,211	18,641	1,034
Depreciation Reserve	199,862	140,591	86	10,844	22,917	5,860	9,700	-	128	3,308	6,259	168
Net Plant	499,078	351,774	215	27,598	56,138	14,092	32,791	-	320	2,903	12,382	866
Rate Base Additions	39,084	27,686	17	2,210	4,253	1,044	2,413	-	25	309	934	192
Rate Base Deductions	124,643	87,106	54	6,873	14,965	3,479	7,281	-	62	1,098	3,321	384
Rate Base Other Total	(85,560)	(59,419)	(37)	(4,663)	(10,712)	(2,435)	(4,867)	-	(57)	(790)	(2,387)	(192)
Rate Base Total	413,519	292,355	178	22,935	45,426	11,657	27,923	-	264	2,113	9,995	673

INCOME STATEMENT

Revenue	131,232	95,165	54	7,049	13,097	3,143	9,239	-	79	659	2,441	305
Tariff Revenue Total	3,514	2,716	1	203	217	23	129	-	2	14	7	2
Other Revenue Total	134,546	97,880	56	7,252	13,315	3,167	9,368	-	80	673	2,448	308

Expenses

Total Operation & Maintenance Expense	36,806	28,725	13	1,821	2,622	465	2,871	-	18	120	115	35
Depreciation Expense	24,387	17,004	11	1,357	2,808	717	1,490	-	16	199	707	78
Other Expenses Amortization Expense Total	1,700	1,228	1	106	160	36	124	-	1	0	0	43
Taxes Other than Income Taxes Excl GRT	853	634	0	46	77	17	60	-	0	5	11	1
Gross Receipts Tax	7,743	5,615	3	416	773	185	545	-	5	39	144	18
Total Operating Expense	71,488	53,206	28	3,746	6,441	1,421	5,090	-	40	363	977	175

Income Before Taxes

Income Before Taxes	63,057	44,675	27	3,506	6,874	1,746	4,277	-	40	310	1,471	133
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Income taxes

Current State Income Tax	5,998	4,263	3	334	645	162	405	-	4	31	134	17
Current Federal Income Tax	14,744	10,500	6	823	1,572	395	1,029	-	9	58	306	46
Provision for Deferred Income Taxes	6,351	4,484	3	353	706	175	415	-	4	37	161	11
Investment Tax Credit Adjustments	-	-	-	-	-	-	-	-	-	-	-	-
Total Income Tax	27,093	19,247	12	1,511	2,923	732	1,849	-	17	136	601	74

Net Income After Tax

Net Income After Tax	35,965	25,427	15	1,995	3,951	1,014	2,428	-	23	184	869	59
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Rate of Return	8.70%	8.70%	8.70%	8.70%	8.70%	8.70%	8.70%	-	8.70%	8.70%	8.70%	8.70%
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Penn Power Exhibit TJD-2
Witness: T.J. Dolezal

Cost of Service
Supporting Studies

Exhibit TJD-2

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Penn Power Exhibit TJD-2
Supporting Study No. 1
Demand Allocators

Average and Excess Study:

Penn Power Exhibit TJD-2

	kWh	Average Demand	Non-Coincident Peak Demand	Excess Demand	Excess Adjusted to Peak	Coincident Peak Demand	Average & Excess
	(1)	(2) = (1)/8760	(3)	(4) = (3) - (2)	(5)	(6)	(7) =(2)+(5)
RS	1,601,692,018	182,842	485,377	302,536	164,699	304,689	347,541
GSR	1,538,554	176	548	372	203	423	378
GSS	51,814,538	5,915	36,894	30,979	16,865	14,796	22,780
GSM	875,634,692	99,958	263,298	163,340	88,922	213,695	188,880
GSL	349,289,318	39,873	95,612	55,738	30,344	79,834	70,217
GP	367,144,409	41,911	76,754	34,842	18,968	63,119	60,879
PNP	2,131,071	243	1,002	759	413	906	656
GT	1,068,370,057	121,960	229,286	107,326	58,428	196,787	180,388
POL	2,852,397	326	1,309	983	535	-	861
STLT	3,061,632	350	2,775	2,425	1,320	-	1,670

Penn Power Exhibit TJD-2
Supporting Study No. 2
Plant Functionalization

Penn Power General Plant Functionalization

Code	Q. Plant	Utility Plant	Penn Power Co. / Municipal Electric / Met. Plant Value		Transmission	Distribution	General Plant		General Plant		General Plant	General Plant	Code	
			Cons.	Trans.			Cons.	Trans.	Cons.	Trans.				
1) Penn Power Co.	18.11 Electric Plant in Service	3300 - Misc. Hangeable Plant	\$1,643,828	\$1,000,314	\$264,325	0.0%	100.0%	\$0.00	\$1,643,828	\$0.00	\$1,643,828	0.0%	100.0%	\$0.00
1) Penn Power Co.	18.11 Electric Plant in Service	3300 - Feed and	\$24,825	\$0.00	\$24,825	0.0%	100.0%	\$0.00	\$24,825	\$0.00	\$24,825	0.0%	100.0%	\$0.00
1) Penn Power Co.	18.11 Electric Plant in Service	3300 - Encasements	\$0.00	\$0.00	\$0.00	0.0%	100.0%	\$0.00	\$0.00	\$0.00	\$0.00	0.0%	100.0%	\$0.00
1) Penn Power Co.	18.11 Electric Plant in Service	3300 - Structures, Improvements	\$1,153,817	\$2,742,042	\$4,777,715	0.0%	100.0%	\$0.00	\$1,153,817	\$2,742,042	\$4,777,715	0.0%	100.0%	\$0.00
1) Penn Power Co.	18.11 Electric Plant in Service	3300 - Clearing, Grading, Land	\$0,240.00	\$0,200.00	\$4,600.00	0.0%	100.0%	\$0.00	\$0,240.00	\$0,200.00	\$4,600.00	0.0%	100.0%	\$0.00
1) Penn Power Co.	18.11 Electric Plant in Service	3300 - Struct. Equip., Electrical Imp	\$47,665.52	\$28,278.57	\$28,278.57	0.0%	100.0%	\$0.00	\$47,665.52	\$28,278.57	\$28,278.57	0.0%	100.0%	\$0.00
1) Penn Power Co.	18.11 Electric Plant in Service	3310 - Office Furn., Mech. Equip.	\$23,266.40	\$55,871.99	\$54,844.59	0.0%	100.0%	\$0.00	\$23,266.40	\$55,871.99	\$54,844.59	0.0%	100.0%	\$0.00
1) Penn Power Co.	18.11 Electric Plant in Service	3320 - Plant Processing Equipment	\$24,243.31	\$1,272,726	\$1,272,912.5	0.0%	100.0%	\$0.00	\$24,243.31	\$1,272,726	\$1,272,912.5	0.0%	100.0%	\$0.00
1) Penn Power Co.	18.11 Electric Plant in Service	3320 - Transportation Equipment	\$29,402.44	\$27,888.73	\$27,888.73	0.0%	100.0%	\$0.00	\$29,402.44	\$27,888.73	\$27,888.73	0.0%	100.0%	\$0.00
1) Penn Power Co.	18.11 Electric Plant in Service	3320 - Stores Equipment	\$17,321.17	\$48,654.81	\$33,655.5	0.0%	100.0%	\$0.00	\$17,321.17	\$48,654.81	\$33,655.5	0.0%	100.0%	\$0.00
1) Penn Power Co.	18.11 Electric Plant in Service	3340 - Tools, Shop, Garage Equip.	\$239,724.00	\$24,723.78	\$1,027,929.3	0.0%	100.0%	\$0.00	\$239,724.00	\$24,723.78	\$1,027,929.3	0.0%	100.0%	\$0.00
1) Penn Power Co.	18.11 Electric Plant in Service	3350 - Laboratory Equipment	\$7,263.3	\$33,313.00	\$1,027.1	0.0%	100.0%	\$0.00	\$7,263.3	\$33,313.00	\$1,027.1	0.0%	100.0%	\$0.00
1) Penn Power Co.	18.11 Electric Plant in Service	3360 - Power Operated Equipment	\$49,265.3	\$19,441.29	\$27,944.54	0.0%	100.0%	\$0.00	\$49,265.3	\$19,441.29	\$27,944.54	0.0%	100.0%	\$0.00
1) Penn Power Co.	18.11 Electric Plant in Service	3370 - Communication Equipment	\$265,472.0	\$19,673.3	\$1,947,854	0.0%	100.0%	\$0.00	\$265,472.0	\$19,673.3	\$1,947,854	0.0%	100.0%	\$0.00
1) Penn Power Co.	18.11 Electric Plant in Service	3380 - Misc. Equipment	\$3,787.44	\$7,702.11	\$1,947.53	0.0%	100.0%	\$0.00	\$3,787.44	\$7,702.11	\$1,947.53	0.0%	100.0%	\$0.00
1) Penn Power Co.	18.11 Complete construct classifed	3390 - Misc. Hangeable Plant	\$147,632.3	\$17,184.43	\$2,702,725.5	0.0%	100.0%	\$0.00	\$147,632.3	\$17,184.43	\$2,702,725.5	0.0%	100.0%	\$0.00
1) Penn Power Co.	18.11 Complete construct classifed	3300 - Structures, Improvements	\$4,302.1	\$1,702.66	\$4,223.5	0.0%	100.0%	\$0.00	\$4,302.1	\$1,702.66	\$4,223.5	0.0%	100.0%	\$0.00
1) Penn Power Co.	18.11 Complete construct classifed	3310 - Office Furn., Mech. Equip.	\$3.23	\$0.14	\$3.4	0.0%	100.0%	\$0.00	\$3.23	\$0.14	\$3.4	0.0%	100.0%	\$0.00
1) Penn Power Co.	18.11 Complete construct classifed	3320 - Plant Processing Equipment	\$1,003,623.3	\$18,301.73	\$2,927,011	0.0%	100.0%	\$0.00	\$1,003,623.3	\$18,301.73	\$2,927,011	0.0%	100.0%	\$0.00
1) Penn Power Co.	18.11 Complete construct classifed	3320 - Transportation Equipment	\$54,855.5	\$4,223.43	\$29,465.27	0.0%	100.0%	\$0.00	\$54,855.5	\$4,223.43	\$29,465.27	0.0%	100.0%	\$0.00
1) Penn Power Co.	18.11 Complete construct classifed	3340 - Tools, Shop, Garage Equip.	\$25,374.44	\$20.3	\$4,929.33	0.0%	100.0%	\$0.00	\$25,374.44	\$20.3	\$4,929.33	0.0%	100.0%	\$0.00
1) Penn Power Co.	18.11 Complete construct classifed	3350 - Laboratory Equipment	\$31.17	\$0.0	\$34.0	0.0%	100.0%	\$0.00	\$31.17	\$0.0	\$34.0	0.0%	100.0%	\$0.00
1) Penn Power Co.	18.11 Complete construct classifed	3360 - Power Operated Equipment	\$48.88	\$12.6	\$23.4	0.0%	100.0%	\$0.00	\$48.88	\$12.6	\$23.4	0.0%	100.0%	\$0.00
1) Penn Power Co.	18.11 Complete construct classifed	3370 - Communication Equipment	\$9,817.3	\$2,881.7	\$7,988.8	0.0%	100.0%	\$0.00	\$9,817.3	\$2,881.7	\$7,988.8	0.0%	100.0%	\$0.00
1) Penn Power Co.	18.11 Complete construct classifed	3380 - Misc. Equipment	\$1.02	\$0.4	\$0.8	0.0%	100.0%	\$0.00	\$1.02	\$0.4	\$0.8	0.0%	100.0%	\$0.00
1) Penn Power Co. Total			\$2,149,252.31	\$2,844,801.3	\$5,651,643.0	0.0%	100.0%	\$0.00	\$2,149,252.31	\$2,844,801.3	\$5,651,643.0	0.0%	100.0%	\$0.00

Penn Power Exhibit TJD-2
Supporting Study No. 3
Customer Deposits Allocation

December 2015

Penn Power	
Rate Category	Deposit Amount
PP-GMD	\$652,082
PP-GMF	\$1,036,833
PP-GPD	\$40,223
PP-GPF	\$84,948
PP-GSD	\$72,095
PP-GSF	\$171,425
PP-GSLD	\$164,499
PP-GSLF	\$16,221
PP-GSRD	\$422
PP-GSRF	\$2,597
PP-GTD	\$202,223
PP-PNPF	\$5,645
PP-POLF	\$660
PP-RSD	\$506,966
PP-RSF	\$2,282,661
TOTAL	\$5,239,499

Sources:

SAP Report of GL Deposit Amounts

Report Center Report - Security Deposits Held

Data Warehouse (EDW) - Customer Account

Penn Power Exhibit TJD-2
Supporting Study No. 4
Customer Account and Information Expense
Allocation

FERC Customer Accounting Analysis
Pennsylvania Power Company
Year Ending December 2015

FERC 902 Meter Reading Expenses

Overview

The allocation methodology required a two-step process. First, a weighting factor was calculated for each rate class based on the number of meters in that rate class and the read time for those meters. Then, these weight factors were used to determine the allocation of the FERC balance across the rate classes.

Source of Data

FERC 902 account balance budgeted for 2017.

Normalized billing units, as provided by Witness Kevin M. Siedt on Exhibit KMS-1 Attachment C, were used for the number of customers at December 2015 (end of period).

Read times for each meter by rate class were obtained from Customer Service Analytics. Streetlights were excluded from the calculations as a majority of those accounts are not metered.

Allocation Methodology

- The December 2015 (end of period) Number of Customers (a) for each rate category is based on the Normalized billing units.
- The weighted factor (b) is based on the read time for each rate category and represents the minutes per meter to obtain a reading.
- The Weighted Customer Count (c) is the Customer Count (a) X Weighted factor (b).
- Total \$ by Rate (d) was calculated by taking the Weighted Customer Count by rate class (c) divided by Total Weighted Customer Count X Total FERC Balance equals FERC balance by rate class.

Example:

Customers By Rate Class	December 2015 Number Customers (a)	Weighted Factor (b)	Weighted Customer Count (c) = (a) * (b)	Total \$ by Rate (d)
Residential				
Rate RS	144,576	1.0022	144,895	\$1,008,611
Rate GSR	69	1.5603	108	\$749
Total Residential	144,645		145,002	\$1,009,360
Commercial				
Rate GS	11,372	1.5833	18,005	\$125,331
Rate GM	9,423	1.5722	14,815	\$103,128
Rate GSL	168	2.3981	403	\$2,804
Rate PNP	89	1.9088	170	\$1,183
Rate OL	813	-	-	-
Total Commercial	21,865		33,393	\$232,446
Industrial				
Rate GP	113	2.1660	245	\$1,704
Rate GT	42	2.0320	85	\$594
Total Industrial	155		330	\$2,298
Public St & Highway Lighting				
Public St & Highway Lighting	86	-	-	-
Total Public St & Highway Lighting	86			
Total	166,751		178,725	\$1,244,104

FERC 903 Customer Records Collection Expenses

Overview

The normalized billing units were used for the number of customers at December 2015 (end of period) to calculate a weighted distribution of the FERC 903 account balance.

Source of Data

FERC 903 account balance for 2015

Normalized billing units were used for the number of customers at December 2015 (end of period).

Allocation Methodology

The weighted factor (b) used to distribute the dollars for each rate class was calculated based on the normalized billing units (a) in each rate category compared to the total customers. This factor (b) was then multiplied by the combined FERC 903 balance to determine the distribution of dollars across the rate classes (c).

Example:

Title of Rate Schedule	December 2015 Number Customers (a)	Factor (b)	\$ Total by Rate (c)
Residential			
Rate RS	144,576	0.8670	\$1,659,043
Rate GSR	69	0.0004	\$792
Total Residential	144,645	0.8674	\$1,659,835
Commercial			
Rate GS	11,372	0.0682	\$130,496
Rate GM	9,423	0.0565	\$108,131
Rate GSL	168	0.0010	\$1,928
Rate PNP	89	0.0005	\$1,021
Rate OL	813	0.0049	\$9,329
Total Commercial	21,865	0.1311	\$250,906
Industrial			
Rate GP	113	0.0007	\$1,297
Rate GT	42	0.0003	\$482
Total Industrial	155	0.0009	\$1,779
Public St & Highway Lighting			
Public Street & Highway Lighting	86	0.0005	\$987
Total Public St & Highway Lighting	86	0.0005	\$987
TOTAL	166,751		\$1,913,506

FERC 904 Uncollectible Accounts

Overview

The normalized billing units were used for the number of customers at December 2015 (end of period) to calculate a weighted distribution of the FERC 904 account balance.

Source of Data

FERC 904 account balance for 2015

Normalized billing units were used for the number of customers at December 2015 (end of period).

Allocation Methodology

The weighted factor (b) used to distribute the dollars for each rate classes was calculated based on the normalized billing units (a) in each rate category compared to the total customers. This factor (b) was then multiplied by the combined FERC 904 balance to determine the distribution of dollars across the rate classes (c).

Example:

Title of Rate Schedule	December 2015 Number Customers (a)	Factor (b)	\$ Total by Rate (c)
Residential			
Rate RS	144,576	0.8670	\$2,665,540
Rate GSR	69	0.0004	\$1,272
Total Residential	144,645	0.8674	\$2,666,813
Commercial			
Rate GS	11,372	0.0682	\$209,665
Rate GM	9,423	0.0565	\$173,731
Rate GSL	168	0.0010	\$3,097
Rate PNP	89	0.0005	\$1,641
Rate OL	813	0.0049	\$14,989
Total Commercial	21,865	0.1311	\$403,124
Industrial			
Rate GP	113	0.0007	\$2,083
Rate GT	42	0.0003	\$774
Total Industrial	155	0.0009	\$2,858
Public St & Highway Lighting			
Public Street & Highway Lighting	86	0.0005	\$1,586
Total Public St & Highway Lighting	86	0.0005	\$1,586
TOTAL	166,751		\$3,074,380

FERC 905 Miscellaneous Customer Accounts Expenses

Overview

The normalized billing units were used for the number of customers at December 2015 (end of period) to calculate a weighted distribution of the FERC 905 account balance.

Source of Data

FERC 905 account balance for 2015

Normalized billing units were used for the number of customers at December 2015 (end of period).

Allocation Methodology

The weighted factor (b) used to distribute the dollars for each rate classes was calculated based on the normalized billing units (a) in each rate category compared to the total customers. This factor (b) was then multiplied by the combined FERC 905 balance to determine the distribution of dollars across the rate classes (c).

Example:

Title of Rate Schedule	December 2015 Number Customers (a)	Factor (b)	\$ Total by Rate (c)
Residential			
Rate RS	144,576	0.8670	\$114,390
Rate GSR	69	0.0004	\$55
Total Residential	144,645	0.8674	\$114,444
Commercial			
Rate GS	11,372	0.0682	\$8,998
Rate GM	9,423	0.0565	\$7,456
Rate GSL	168	0.0010	\$133
Rate PNP	89	0.0005	\$70
Rate OL	813	0.0049	\$643
Total Commercial	21,865	0.1311	\$17,300
Industrial			
Rate GP	113	0.0007	\$89
Rate GT	42	0.0003	\$33
Total Industrial	155	0.0009	\$123
Public St & Highway Lighting			
Public Street & Highway Lighting	86	0.0005	\$68
Total Public St & Highway Lighting	86	0.0005	\$68
TOTAL	166,751		\$131,935

FERC 450 & 451 Forfeited Discounts and Miscellaneous Service Revenues

Overview

The normalized billing units were used for the number of customers at December 2015 (end of period) to calculate a weighted distribution of the FERC 450 and 451 expenses.

Source of Data

FERC 450 and 451 account balance for 2015

Normalized billing units were used for the number of customers at December 2015 (end of period).

Allocation Methodology

The weighted factor (b) used to distribute the dollars for each rate classes was calculated based on the normalized billing units (a) in each rate category compared to the total customers. This factor (b) was then multiplied by the combined FERC 450 and 451 balance to determine the distribution of dollars across the rate classes (c).

Example:

Title of Rate Schedule	December 2015 Number Customers (a)	Factor (b)	\$ Total by Rate (c)
Residential			
Rate RS	144,576	0.8670	(\$765,412)
Rate GSR	69	0.0004	(\$365)
Total Residential	144,645	0.8674	(\$765,777)
Commercial			
Rate GS	11,372	0.0682	(\$60,205)
Rate GM	9,423	0.0565	(\$49,887)
Rate GSL	168	0.0010	(\$889)
Rate PNP	89	0.0005	(\$471)
Rate OL	813	0.0049	(\$4,304)
Total Commercial	21,865	0.1311	(\$115,757)
Industrial			
Rate GP	113	0.0007	(\$598)
Rate GT	42	0.0003	(\$222)
Total Industrial	155	0.0009	(\$821)
Public St & Highway Lighting			
Public Street & Highway Lighting	86	0.0005	(\$455)
Total Public St & Highway Lighting	86	0.0005	(\$455)
TOTAL	166,751		(\$882,810)

FERC 908 Customer Assistance Expenses

Overview

The FERC 908 account balance for 2015 was assigned to Rate RS because it is the only rate schedule on which the customers receiving service participate in the Company's customer assistance programs.

Source of Data

FERC 908 account balance for 2015

Allocation Methodology

The FERC 908 account balance was assigned to RS Rate (a)

Example:

Company	Balance	RS Balance (a)
Penn Power	\$8,149,409	\$8,149,409

FERC 910 Miscellaneous Customer Service and Information Expenses

Overview

FERC 910 account balances were distributed based on actual call volume for 2015. Ratios for rate class call volumes were calculated based on call volume and the normalized billing units were used for the number of customers and then applied to the total FERC balance to distribute the dollars across the rate classes.

Source of Data

FERC 910 account balance for 2015

Normalized billing units were used for the number of customers at December 2015 (end of period).

Call Volumes from the IVR Calls by Call Report for 2015

Allocation Methodology

Cost Allocations by Call Category were performed by multiplying the FERC Form 910 Costs by the Percentage of Calls in each category (Residential, Commercial & Industrial, and Streetlight) compared to the total Call Volume. Because commercial and industrial calls cannot be broken out by customer class, a percentage was calculated for the commercial and for the industrial classes based on normalized billing units- the number of customers at December 2015 (end of period). These percentages were then used to allocate costs to each of the categories.

Example:

Calls by Customer Category	Count	Percentage	\$
Residential	500,903	97.93%	\$1,336,778
Commercial & Industrial	10,042	1.96%	\$26,799
<i>Commercial (Based on Customer Count)¹</i>	-	99.30%	\$26,611
<i>Industrial (Based on Customer Count)²</i>	-	0.70%	\$189
Public Street & Highway Lighting	566	0.11%	\$1,511
Total Calls	511,511	100.00%	\$1,365,088

¹Commercial (Based on Customer Count) = Total Commercial Customers/Total Commercial & Industrial Customers

²Industrial (Based on Customer Count) = Total Industrial Customers / Total Commercial & Industrial Customers

To calculate the distribution of dollars across the rate classes (c) the percentage of customers in each rate category was calculated (b) based on the normalized billing units (a). This percentage was then multiplied by the dollars allocated to each Call Category (Residential, Commercial, Industrial, and Streetlight), as calculated above, to determine the dollars by rate class.

Example:

Customers By Rate Class	December 2015 Number Customers (a)	Percentage (b)	Total \$ by Rate (c)
Residential			
Rate RS	144,576	99.95%	\$1,336,140
Rate GSR	69	0.05%	\$638
Total Residential	144,645	100.00%	\$1,336,778
Commercial			
Rate GS	11,372	52.01%	\$13,840
Rate GM	9,423	43.10%	\$11,468
Rate GSL	168	0.77%	\$204
Rate PNP	89	0.41%	\$108
Rate OL	813	3.72%	\$989
Total Commercial	21,865	100.00%	\$26,611
Industrial			
Rate GP	113	72.90%	\$138
Rate GT	42	27.10%	\$51
Total Industrial	155	100.00%	\$189
Public St & Highway Lighting			
Public Street & Highway Lighting	86	100.00%	\$1,511
Total Public St & Highway Lighting	86	100.00%	\$1,511
Total	166,751		\$1,365,088

Summary Chart

Pennsylvania Power Company Customer Accounting Total Account Dollars Assigned to Rate Group							
Rate	Meter Reading	Customer Records Collection	Uncollectible Accounts	Miscellaneous Customer Accounts	Forfeited Discounts and Miscellaneous Service Revenues	Cust Asst	MISC
Classes	902	903	904	905	450 & 451	908	910
Residential							
Rate RS	\$1,008,611	\$1,659,043	\$2,665,540	\$114,390	(\$765,412)	\$8,149,409	\$1,336,140
Rate GSR	\$749	\$792	\$1,272	\$55	(\$365)	-	\$638
Total Residential	\$1,009,360	\$1,659,835	\$2,666,813	\$114,444	(\$765,777)	\$8,149,409	\$1,336,778
Commercial							
Rate GS	\$125,331	\$130,496	\$209,665	\$8,998	(\$60,205)	-	\$13,840
Rate GM	\$103,128	\$108,131	\$173,731	\$7,456	(\$49,887)	-	\$11,468
Rate GSL	\$2,804	\$1,928	\$3,097	\$133	(\$889)	-	\$204
Rate PNP	\$1,183	\$1,021	\$1,641	\$70	(\$471)	-	\$108
Rate OL	-	\$9,329	\$14,989	\$643	(\$4,304)	-	\$989
Total Commercial	\$232,446	\$250,906	\$403,124	\$17,300	(\$115,757)	\$0	\$26,611
Industrial							
Rate GP	\$1,704	\$1,297	\$2,083	\$89	(\$598)	-	\$138
Rate GT	\$594	\$482	\$774	\$33	(\$222)	-	\$51
Total Industrial	\$2,298	\$1,779	\$2,858	\$123	(\$821)	\$0	\$189
Public St & Highway Lighting							
Public Street & Highway Lighting	-	\$987	\$1,586	\$68	(\$455)	-	\$1,511
Total Public St & Highway Lighting	\$0	\$987	\$1,586	\$68	(\$455)	\$0	\$1,511
TOTAL	\$1,244,104	\$1,913,506	\$3,074,380	\$131,935	(\$882,810)	\$8,149,409	\$1,365,088

Penn Power Exhibit TJD-2
Supporting Study No. 5
Labor (O&M)

Penn Power Special Study #5 (Labor)

Penn Power Exhibit TJD-2

Function	FERC Account Number	O&M Expense TOTAL	Direct Labor Expense	Percentage of Total w A&G
Power Supply				
Power Supply	514	0	0	
Power Supply	518	0	0	
Power Supply	555	151,735	0	
Power Supply	557	47	0	
TOTAL		151,782	0	0.00%
Transmission				
Transmission	560	2	2	
Transmission	561	7	9	
Transmission	562	0	0	
Transmission	563	0	0	
Transmission	564	0	0	
Transmission	565	4,380	0	
Transmission	566	73	9	
Transmission	567	0	0	
Transmission	568	21	24	
Transmission	569	14	3	
Transmission	570	3	0	
Transmission	571	-174	-205	
Transmission	573	0	0	
TOTAL		4,327	-168	-1.76%
Distribution				
Distribution	580	0	0	
Distribution	581	0	0	
Distribution	582	0	0	
Distribution	583	0	0	
Distribution	584	533	0	
Distribution	585	0	0	
Distribution	586	60	64	
Distribution	587	0	0	
Distribution	588	1,138	850	
Distribution	589	319	0	
Distribution	590	83	70	
Distribution	591	0	0	
Distribution	592	1,101	363	
Distribution	593	12,570	3,938	
Distribution	594	48	56	
Distribution	595	49	47	
Distribution	596	0	0	
Distribution	597	258	239	
Distribution	598	76	16	
TOTAL		16,234	5,643	62.94%
Customer Accounts				
Customer Accounts	902	1,244	929	
Customer Accounts	903	1,509	671	
Customer Accounts	904	3,697	0	
Customer Accounts	905	473	61	
TOTAL		6,923	1,661	18.53%
Customer Service				
Customer Service	907	0	0	
Customer Service	908	10,701	273	
Customer Service	909	129	0	
Customer Service	910	1,459	1,042	
Customer Service	911	18	6	
Customer Service	912	0	0	
Customer Service	913	7	0	
Customer Service	916	0	0	
TOTAL		12,313	1,322	14.74%
A&G (Unfunctionalized)				
A&G (Unfunctionalized)	920	-218	0	
A&G (Unfunctionalized)	921	1,034	0	
A&G (Unfunctionalized)	923	10,314	403	
A&G (Unfunctionalized)	924	29	0	
A&G (Unfunctionalized)	925	312	0	
A&G (Unfunctionalized)	926	998	0	
A&G (Unfunctionalized)	928	742	0	
A&G (Unfunctionalized)	930.1	55	0	
A&G (Unfunctionalized)	930.2	207	7	
A&G (Unfunctionalized)	931	17	0	
A&G (Unfunctionalized)	935	446	87	
TOTAL		13,937	497	5.54%
TOTAL w/o A&G		191,580	8,469	
TOTAL w/ A&G		205,517	8,966	
% of Labor Transmission w/o A&G				-1.86%

Penn Power Exhibit TJD-2
Supporting Study No. 6
Meter Plant Allocation

Penn Power Meter Plant Special Study #6

Penn Power Exhibit TJD-2

Weighted Meter Allocator with Smart Meter Adj					
OpcO	Rate Schedule	Meter Count	Avg Meter Cost*	Weighting Factor	Weighted Meter Allocator
PP	RS	149,666	\$ 110	1.00	149,666
PP	GSR	69	\$ 156	1.42	98
PP	GSS	10,738	\$ 133	1.21	12,969
PP	GSM	8,769	\$ 245	2.23	19,521
PP	GSL	168	\$ 2,871	26.08	4,381
PP	GP	117	\$ 14,178	128.78	15,067
PP	PNP	89	\$ 178	1.61	144
PP	GT	44	\$ 13,238	120.24	5,291

*Average meter cost includes expenses, labor, materials, and CT/PT expenses where applicable

Weighted Meter Allocator w/o Smart Meter Adj					
OpcO	Rate Schedule	Meter Count	Avg Meter Cost*	Weighting Factor	Weighted Meter Allocator
PP	RS	149,666	\$ 110	1.00	149,666
PP	GSR	69	\$ 157	1.42	98
PP	GSS	10,738	\$ 133	1.21	12,993
PP	GSM	8,769	\$ 246	2.23	19,583
PP	GSL	168	\$ 2,872	26.09	4,383
PP	GP	117	\$ 14,178	128.80	15,070
PP	PNP	89	\$ 178	1.62	144
PP	GT	44	\$ 13,238	120.27	5,292

*Average meter cost includes expenses, labor, materials, and CT/PT expenses where applicable

Detailed calculation of total cost per customer used to develop the weighting factors and weighted customer allocator:

Rate Group	End of Period HTY Customer Count	Meter Count	Meter Cost	Meter Labor	PT/CT Cost & Labor	Total Cost	Total Cost per Customer	Weighting Factor	Weighted Customer Allocator
RS	144,576	149,666	\$ 14,249,393	\$ 2,215,590	\$ 12,125	\$ 16,477,108	\$ 110	1.0	149,666
GSR	69	69	\$ 8,854	\$ 1,066	\$ 866	\$ 10,785	\$ 156	1.4	98
GSS	11,372	10,738	\$ 1,240,626	\$ 160,128	\$ 27,089	\$ 1,427,843	\$ 133	1.2	12,969
GSM	9,423	8,769	\$ 1,314,549	\$ 148,570	\$ 686,002	\$ 2,149,122	\$ 245	2.2	19,521
GSL	168	168	\$ 39,753	\$ 4,599	\$ 438,014	\$ 482,366	\$ 2,871	26.1	4,381
GP	113	117	\$ 81,318	\$ 3,479	\$ 1,573,986	\$ 1,658,783	\$ 14,178	128.8	15,067
PNP	89	89	\$ 10,299	\$ 1,465	\$ 4,051	\$ 15,816	\$ 178	1.6	144
GT	42	44	\$ 31,436	\$ 1,278	\$ 549,750	\$ 582,464	\$ 13,238	120.2	5,291

Penn Power Exhibit TJD-2
Supporting Study No. 7
Minimum Grid and Primary/Secondary Studies

Customer Component of

FERC Account 364 – POLES, TOWERS, AND FIXTURES

FERC Account 365 – OVERHEAD CONDUCTORS & DEVICES

FERC Account 367 – UNDERGROUND CONDUCTORS & DEVICES

FERC Account 368 – LINE TRANSFORMERS

Primary Customer/Secondary Customer Component of

FERC Account 364 – POLES, TOWERS, AND FIXTURES

FERC Account 365 – OVERHEAD CONDUCTORS & DEVICES

FERC Account 366 – UNDERGROUND CONDUIT

FERC Account 367 – UNDERGROUND CONDUCTORS & DEVICES

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SCOPE

This report addressed two concepts. The first is the allocation of a portion of certain distribution plant accounts on the basis of number of customers by employing a “minimum grid” analysis (the identification of the customer component is hereafter referred to as the “Customer Cost Study”) with the remaining portion of such plant accounts allocated on the basis of demand. NARUC describes the basic elements of a Customer Cost Study in its publication “Electric Utility Cost Allocation Manual.”¹ The second is the sub-functionalization and allocation of certain distribution costs between customers served at primary voltage and those served at secondary voltage.

Customer Cost Study

The Customer Cost Study is designed to separate the asset values into component costs, as follows;

- Customer Related Costs
- Demand Related Costs
- Energy Related Costs

The costs of the distribution system are primarily driven by demand and number of customers. Consequently, the purpose of this study is to allocate investment in utility plant based on those two cost components.² The plant accounts covered by this study are:

- FERC Account 364 – POLES, TOWERS, AND FIXTURES
- FERC Account 365 – OVERHEAD CONDUCTORS & DEVICES
- FERC Account 367 – UNDERGROUND CONDUCTORS & DEVICES
- FERC Account 368 – LINE TRANSFORMERS

Primary/Secondary Customer Cost Study

The primary/secondary customer cost study is aimed at determining the portion of the distribution assets that are used solely to serve primary voltage customers. For example, distribution transformers, secondary conductors, and service conductors are not used to serve primary voltage customers. Similarly some accounts have only a limited amount of assets that are used to provide service to primary service customers. The Primary/Secondary Customer Cost Study is designed to determine the extent to which each of those accounts is used by Primary voltage customers.³ The accounts covered by this study are the same as those studied in the Customer Cost Study, namely:

- FERC Account 364 – POLES, TOWERS, AND FIXTURES

¹ National Association of Regulatory Utility Commissions (NARUC). *Electric Utility Cost Allocation Manual*, 1992.

² *ibid*, p. 21.

³ *ibid*, p. 19.

- FERC Account 365 – OVERHEAD CONDUCTORS & DEVICES
- FERC Account 366 – UNDERGROUND CONDUIT
- FERC Account 367 – UNDERGROUND CONDUCTORS & DEVICES

DEFINITIONS AND TERMS

A number of large data bases house the information that is used in the preparation of this report. The following definitions and terms describe the systems and applications from which data was extracted and the software tools used to extract, analyze, and summarize that information. References are provided to any external data sources used.

Company Computer Systems, Data and Processes

The Company has a number of computer systems that house data used for this study. As utilities have grown, so has the size and complexity of these systems, leading to the need to use software tools like Structured Query Language (“SQL”) queries to analyze data sets that can no longer be effectively analyzed using common desktop tools like Excel.

CCS

The Company’s Customer Care System (“CCS”) is its customer accounting and billing system. With data contained in this system, the Company is able to identify the type of customer by its customer rate code. The Geographical Information System (“GIS”) and CCS customer records are connected through connection object database keys, which enable the Company to determine where, on the geographically represented system, each customer, and customer type, is connected. The CCS is a sub-system of the Company’s SAP enterprise software (see the discussion of SAP below).

CREWS

The Customer Request Work Scheduling System (“CREWS”) is FirstEnergy’s work management system that is used by the Company to perform engineering estimates for construction work.

GIS

The Company’s GIS is the computer system providing a geographically referenced asset database of the installed distribution plant information, including information on poles, primary conductors, fuses, transformers, and switches, and how those pieces of the electric distribution system are electrically interconnected from the substation to the customer. The GIS is used primarily for mapping and detailing the distribution system aiding engineering design, planning and troubleshooting tasks.

SAP

SAP⁴ is the vendor that provided the enterprise software that bundles applications and services to enable companies to manage their businesses. These applications can include CIS, billing, financial, purchasing, inventory, and human resources functions.

Software Tools

SQL

SQL⁵ is a special programming language designed to manage and extract data held in a relational data base management system ("RDBS"), like Oracle, Sybase, MySQL, or, Microsoft SQL Server. Most of the Company's data bases that were used to prepare this report are Oracle RDBSs.

BRIO

Hyperion Intelligence Designer, by Hyperion Solutions Corporation (now owned by Oracle), or BRIO, as it is known within the Company, is a general purpose SQL query and reporting tool that allow the Company to perform and produce Excel-like analysis and reports on data sets too large or complex to handle within Microsoft Excel.

Perl

Perl, by ActiveState,⁶ is a high-level, general-purpose, scripting language, typically operated in an interpreted (not compiled) form. Perl is used primarily as a tool to encapsulate and run raw SQL queries, and may be used to provide some additional summarization for the purposes of reporting.

External Data Sources

Handy-Whitman Index

The *Handy-Whitman Index of Public Utility Construction*⁷ provides asset price indexes and the capital book value against a benchmark year. Handy-Whitman Index numbers serve as a yardstick to estimate the impact of fluctuations in the value of material and labor costs, allowing assets of a known age to be reflected in other years. Average prices and cost trends are used to develop the Handy-Whitman Index. This Index is commonly used by utilities and regulators in their calculations of rate base for rate cases and in their valuations of property for insurance purposes.

⁴ SAP, www.sap.com.

⁵ ISO/IEC 9075-1:2011, *Information technology -- Database languages -- SQL -- Part 1: Framework (SQL/Framework)*,

⁶ ActiveState, www.activestate.com.

⁷ *Handy-Whitman Index of Public Utility Construction*, Whitman, Requardt and Associates, LLP, 801 South Caroline Street, Baltimore, MD 21231,

Electric Utility Cost Allocation Manual⁸

The NARUC's Electric Utility Cost Allocation Manual was written by a team of utility, state public utility commission, and FERC representatives and provides frameworks for performing cost of service studies. Section II of this Manual contains five chapters that explain the dominant method of cost allocation - the embedded cost study, which is based upon historical or known utility costs. Areas covered by such studies are production costs, transmission costs, distribution costs and the classification and allocation of customer-related costs and investments.

⁸ National Association of Regulatory Utility Commissions (NARUC). *Electric Utility Cost Allocation Manual*, 1992.

Customer Component of

FERC Account 364 – POLES, TOWERS, AND FIXTURES

FERC Account 365 – OVERHEAD CONDUCTORS & DEVICES

FERC Account 367 – UNDERGROUND CONDUCTORS & DEVICES

FERC Account 368 – LINE TRANSFORMERS

FERC Account 364 – POLES, TOWERS, AND FIXTURES

This distribution plant account is predominately made up of the various wood distribution poles used to support primary and secondary distribution conductors.

Assumptions and Method

- The Company’s GIS was used to determine the number of wood distribution poles, by size and installation year. In the analysis, the costs of these poles were replaced by the cost of minimum size wood distribution poles that have seen common use within the study territory (35-foot poles for those supporting primary conductors without a joint use underbuild).
 - Poles without an installation year were omitted.
 - Poles with installation years earlier than 1915 were omitted.
 - Only poles supporting primary conductor were included (i.e., street-light and secondary-only poles were omitted).
 - Only wood or laminated poles were considered ... the other materials are fiberglass, steel, concrete, aluminum, etc. materials that are unlikely for “distribution” poles.
 - Only poles with a height of 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, or 95 feet were considered; the other pole heights typically indicate either street-light only poles or erroneous data.
- The current installed cost for each size pole was obtained from CREWS, and trended by size to build a list of costs by pole length for each size wood pole.
- The installation years were used to age the current costs for the actual size and minimum size transformers, using Handy-Whitman indices, extended by the number of poles in service for each year, and then summed to develop the customer component for this plant account.
- The percentage of minimum size cost (Customer Cost), of the Total Plant Value was calculated as the portion represented by the cost of the minimum sized units, 35 foot poles, as previously defined. The percentage of the demand costs for the account is the remainder, after the customer cost component was removed.

FERC Account 364 POLES, TOWERS, AND FIXTURES SPLIT OF PLANT					
Company	Total Plant Value	Customer Costs		Demand Costs	
		Percent	Value	Percent	Value
Penn Power	\$98,509,922 ⁹	80.9%	\$79,666,496	19.1%	\$18,843,426

⁹ Per Pennsylvania Power Company, FERC Form No. 1, Year/Period of Report, End of 2014/Q4, Account 364, Balance at End of Year, pg. 207.

FERC Account 365 - OVERHEAD CONDUCTORS AND DEVICES

This distribution plant account is predominately made up of the various overhead distribution line conductors, operating at either primary or secondary voltage. This study considered primary conductors only because the data in the Company's GIS is not sufficient to perform a similar analysis on the costs of secondary, service, and/or street-light conductors. The Company's GIS data is also not sufficient to perform a Handy-Whitman analysis of the installation date for primary conductors.

Assumptions and Method

- The Company's GIS was used to determine the wire-miles of overhead primary distribution line conductors, by size. These conductors were categorized into two sizes, large and small.
 - Conductors with a blank or unknown conductor type/size were omitted.
- The current installed cost for each category of primary line conductor was obtained and used to cost out the currently installed system, as if rebuilt using one of those two sizes.
- The minimum grid cost was developed using only the cost of the smaller conductor.
- The percentage of minimum size cost (Customer Cost), of the Total Plant Value was calculated as the portion represented by the cost of the system, built with the minimum sized conductor.

FERC Account 365 OVERHEAD CONDUCTORS AND DEVICES SPLIT OF PLANT					
Company	Total Plant Value	Customer Costs		Demand Costs	
		Percent	Value	Percent	Value
Penn Power	\$143,698,664 ¹⁰	89.9%	\$129,133,651	10.1%	\$14,565,013

¹⁰ Per Pennsylvania Power Company, FERC Form No. 1, Year/Period of Report, End of 2014/Q4, Account 365, Balance at End of Year, pg. 207.

FERC Account 367 - UNDERGROUND CONDUCTORS AND DEVICES

This distribution plant account is predominately made up of the various underground distribution line conductors, operating at either primary or secondary voltage. This study considered primary conductors only because the data available from the Company's GIS is not sufficient to perform a similar analysis on the costs of secondary and/or service conductors.

Assumptions and Method

- The Company's GIS was used to determine the wire-miles of underground primary distribution line conductors, by size. These conductors were categorized into two sizes, large and small.
 - Conductors with a blank or unknown conductor type/size were omitted
 - Conductor segments greater than 2,500' were considered data errors and omitted
- The current installed cost for each category of primary line conductor was obtained and used to cost out the currently installed system, as if rebuilt using one of those two sizes.
- The minimum grid cost was developed using only the cost of the smaller conductor.
- The percentage of minimum size cost (Customer Cost), of the Total Plant Value was calculated as the portion represented by the cost of the system, built with the minimum sized conductor.

FERC Account 367 UNDERGROUND CONDUCTORS AND DEVICES SPLIT OF PLANT					
Company	Total Plant Value	Customer Costs		Demand Costs	
		Percent	Value	Percent	Value
Penn Power	\$58,328,949 ¹¹	84.7%	\$49,410,399	15.3%	\$8,918,550

¹¹ Per Pennsylvania Power Company, FERC Form No. 1, Year/Period of Report, End of 2014/Q4, Account 367, Balance at End of Year, pg. 207.

FERC Account 368 - LINE TRANSFORMERS

This distribution plant account is predominately made up of the various distribution transformers used to step the distribution voltage down to the service-voltage level delivered to the customer. This account includes both overhead and pad-mounted transformers.

Assumptions and Method

- The Company’s GIS system was used to determine the number of overhead and pad-mounted distribution transformers, by size and installation year, to be replaced by the minimum size (25 KVA) overhead line transformer that is in common use within the study territory.
- The current installed cost for each size line transformer was obtained from CREWS and trended by size to build a list of costs by size for each size of overhead and pad-mounted distribution transformers.
- The installation years were used to age the current costs for the actual size and minimum size transformers using Handy-Whitman indices, extended by the number of transformers in service for each year, and then summed to develop the customer component for this plant account.
- Transformers missing an installation year, construction type, or kVA were omitted.
- The minimum size cost was calculated as the portion represented by the cost of the minimum sized units.

FERC Account 368 LINE TRANSFORMERS SPLIT OF PLANT					
Company	Total Plant Value	Customer Costs		Demand Costs	
		Percent	Value	Percent	Value
Penn Power	\$99,756,623 ¹²	60.1%	\$59,943,858	39.9%	\$39,812,765

¹² Per Pennsylvania Power Company, FERC Form No. 1, Year/Period of Report, End of 2014/Q4, Account 368, Balance at End of Year, pg. 207.

Primary Customer/Secondary Customer Component of

FERC Account 364 – POLES, TOWERS, AND FIXTURES

FERC Account 365 – OVERHEAD CONDUCTORS & DEVICES

FERC Account 366 – UNDERGROUND CONDUIT

FERC Account 367 – UNDERGROUND CONDUCTORS & DEVICES

FERC Account 364 – POLES, TOWERS, AND FIXTURES

This distribution plant account is predominately made up of the various wood distribution poles used to support primary and secondary distribution conductors.

Assumptions and Method

Using data from the Company's GIS, the investment in wood poles was separated by poles which have both primary and secondary attached facilities, poles with secondary attached facilities, poles with primary attached facilities and wood poles with street-lighting facilities. To separate the value of the account into those categories, the raw pole counts were calculated as well as a weighting based upon the cost to install a pole in 2015 dollars.

The Company's pole data allows for the identification of the total investment in wood poles and wood poles with primary facilities attached, but does not allow for the identification of poles with private-outdoor lighting facilities, street-light facilities or secondary facilities. The poles serving primary service customers are allocated to primary voltage customers, while all other poles had to be allocated to the secondary voltage customers.

A list of primary accounts was extracted from the CCS and used as the starting point for "traces" in the GIS system. From these GIS traces, each of the primary accounts and their associated Connection Object were reviewed to determine if multiple primary customers shared primary circuit routes to ensure that facilities allocated to primary rate customers were only counted once.

- Only poles supporting primary and secondary conductor were included (i.e., street-light only poles were omitted).
- Only wood or laminated poles were considered ... the other materials are fiberglass, steel, concrete, aluminum, etc. materials that are unlikely for "distribution" poles.
- Only poles with a height of 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, or 95 feet were considered; the other pole heights typically indicate either street-light only poles or erroneous data.

FERC Account 364 POLES, TOWERS, AND FIXTURES SPLIT OF PLANT					
Company	Total Plant Value	Primary Customers		Secondary and Street Light Customers	
		Percent	Value	Percent	Value
Penn Power	\$98,509,922 ¹³	3.5%	\$3,467,139	96.5%	\$95,042,783

When a device or structure serves multiple primary customers, it is only counted one time in the results. See Figure 1 for a simplified graphical representation.

¹³ Per Pennsylvania Power Company, FERC Form No. 1, Year/Period of Report, End of 2014/Q4, Account 364, Balance at End of Year, pg. 207.

FERC Account 365 – OVERHEAD CONDUCTORS & DEVICES

This distribution plant account is predominately made up of the various overhead distribution line conductors, operating at either primary or secondary voltage. This study considered primary conductors only because the data available from the Company's GIS is not sufficient to perform a similar analysis on the costs of secondary and/or service conductors.

Assumptions and Method

The primary conductors are allocated to both primary and secondary rates. To simplify the summations, the conductors were divided into two sizes: large and small. The unique conductor paths, avoiding the duplicate counting of conductors, were calculated for all the primary customers back to the breaker on each circuit.

The conductor length of unique primary conductor, in feet, is determined by obtaining the span length of each primary line segment and then, by segment, multiplying by the number of conductors and summing to obtain the total feet of primary conductor used to serve primary customers. The same process is used for determining the total conductor feet for all primary conductors in the system.

A weighting is then used to account for the differences in the cost to install a foot of large vs. a foot of small conductor. The weighted conductor length for primary conductors feeding primary voltage customers is then compared to the weighted total conductor length of all conductors to obtain the percentage of primary conductor used by the primary rate customers.

FERC Account 365 OVERHEAD CONDUCTORS AND DEVICES SPLIT OF PLANT					
Company	Total Plant Value	Primary Customers		Secondary Customers	
		Percent	Value	Percent	Value
Penn Power	\$143,698,664 ¹⁴	14.2%	\$20,375,312	85.8%	\$123,323,352

When a device or structure serves multiple primary customers, it is only counted one time in the results. See Figure 1 for a simplified graphical representation.

¹⁴ Per Pennsylvania Power Company, FERC Form No. 1, Year/Period of Report, End of 2014/Q4, Account 365, Balance at End of Year, pg. 207.

FERC Account 366 – UNDERGROUND CONDUIT

Conduit systems are used to supply both the primary and secondary voltage customers. The majority of the conduit system is used to protect primary cable (which can be used to serve both primary customers and, via transformation, secondary customers). Of that majority of the conduit system, most is installed to protect large primary cables. Said another way, the majority of the large-sized primary cables is installed in conduit, and the majority of the small-sized primary cables is direct buried. The majority of secondary cables is direct buried.

Assumptions and Method

The circuit length of unique large sized, underground primary conductor, in feet, is determined by obtaining the span length of each primary line segment and summing those segments to derive the total primary circuit feet used to serve primary customers. The same process is used for determining the total circuit feet for all large primary conductors in the system.

- Conductors with a blank or unknown conductor type/size were omitted.
- Conductor segments greater than 2,500' were considered data errors and omitted.

The circuit length for large primary conductors, serving primary rate customers, is then compared to the total large primary circuit length to obtain the percentage of conduit systems used by the primary rate customers.

FERC Account 366 UNDERGROUND CONDUIT SPLIT OF PLANT					
Company	Total Plant Value	Primary Customers		Secondary Customers	
		Percent	Value	Percent	Value
Penn Power	\$7,442,818 ¹⁵	3.9%	\$289,035	96.1%	\$7,153,783

When a device or structure serves multiple primary customers, it is only counted one time in the results. See Figure 1 for a simplified graphical representation.

¹⁵ Per Pennsylvania Power Company, FERC Form No. 1, Year/Period of Report, End of 2014/Q4, Account 366, Balance at End of Year, pg. 207.

FERC Account 367 – UNDERGROUND CONDUCTORS & DEVICES

This distribution plant account is predominately made up of the various underground distribution line conductors operating at either primary or secondary voltage. This study considered primary conductors only because the data available from the Company’s GIS is not sufficient to perform a similar analysis on the costs of secondary and/or service conductors.

Assumptions and Method

The primary conductors are allocated to both primary and secondary rates. To simplify the summations, the conductors were divided into two sizes: large and small. The unique conductor paths, avoiding the duplicate counting of conductors, were calculated for all the primary customers back to the breaker on each circuit.

- Conductors with a blank or unknown conductor type/size were omitted.
- Conductor segments greater than 2,500’ were considered data errors and omitted.

The conductor length of unique primary conductor feet is determined by obtaining the span length of each primary line segment and then, by segment, multiplying by the number of conductors and summing to obtain the total primary conductor feet used to serve primary customers. The same process is used for determining the total conductor feet for all primary conductors in the system.

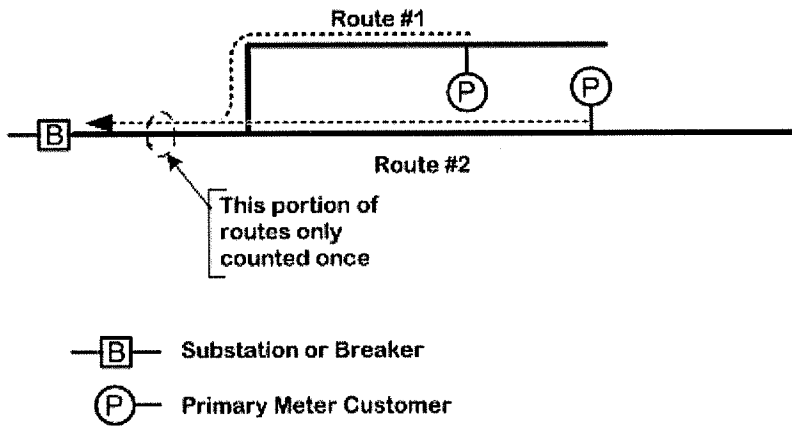
A weighting is then used to account for the differences in cost to install a foot of large vs. a foot of small conductor. The weighted conductor length for primary conductors feeding primary voltage customers is then compared to the weighted total conductor length of all conductors to obtain the percentage of primary conductor used by the primary rate customers.

FERC Account 367 UNDERGROUND CONDUCTORS AND DEVICES SPLIT OF PLANT					
Company	Total Plant Value	Primary Customers		Secondary Customers	
		Percent	Value	Percent	Value
Penn Power	\$58,328,949 ¹⁶	1.8%	\$1,043,418	98.2%	\$57,285,531

When a device or structure serves multiple primary customers, it is only counted one time in the results. See Figure 1 for a simplified graphical representation.

¹⁶ Per Pennsylvania Power Company, FERC Form No. 1, Year/Period of Report, End of 2014/Q4, Account 367, Balance at End of Year, pg. 207.

Figure 1 – Primary Customer Connection & Routing



Penn Power Exhibit TJD-2
Supporting Study No. 8
Street Light Study

Streetlights

FERC Account 364 – POLES, TOWERS, AND FIXTURES

FERC Account 364 – POLES, TOWERS, AND FIXTURES

This plant distribution account is predominately made up of the various wood distribution poles used to support primary and secondary distribution conductors.

Assumptions and Method

- The Company's GIS was used to determine the number of street lights on distribution poles, by size and installation year of the pole.
 - The pole count does not identify whether the pole is used for anything other than streetlights. (i.e. distribution primary or secondary conductors)
 - Streetlights attached to joint use poles were not included.
 - Poles taller than 55 feet were excluded from this study.
- The current installed cost for each size pole was obtained from CREWS, and trended by size to build a list of costs by pole length for each size wood pole.
- The installation years were used to age the current costs for the actual size poles using Handy-Whitman indices, extended by the number of poles in service for each year, and then summed to develop the streetlight component for this plant account.
- This study was based on the following data.

Company	Total Plant Value	Streetlight Costs	
		Percent	Value
Penn Power	\$98,509,922 ¹	4.1%	\$4,063,401

¹ Per Pennsylvania Power Company, FERC Form No. 1, Year/Period of Report, End of 2014/Q4, Account 364, Balance at End of Year, pg. 207.

Penn Power Exhibit TJD-2
Supporting Study No. 9
Allocation of Other Revenue

Penn Power Special Study 09 Other Revenue Functionalization Penn Power Exhibit TJD-2

Acct	Description	Total Company	Power Supply	Distribution	TSC Charges	Other Trans.	Stranded Costs
450000	Forfeited Discount	1,290,918		1,290,918			
451 Accounts							
451000	Misc Service	168,572		168,572			
451001	Misc Service -OE01 OH Cnt Reg	-		-			
451003	Misc Service -OE01 OH Wst Reg	-		-			
451008	Misc Service - PP01 Oh Est Reg	25,801		25,801			
451009	Misc Service -ME01 PA Est Reg	-		-			
451010	Misc Service - PN01 PA Wst Reg	-		-			
451012	Misc Service - JC01 PA Nth Reg	-		-			
451100	Misc Service - Temp Fac Clrgs- Powerplant Only	-		-			
451100	Revenues Misc Serv MP01	-		-			
Total of 451 Accounts		194,373		194,373			
454 Accounts							
454000	Rent from Electric Property	121,815		121,815			
454001	Rent from Elec Prop - PP01 OH Cnt Reg	84		84			
454008	Rent from Elec Prop - PP01 OH Est Reg	1,514,653		1,514,653			
454126	Rent from Prop - Elec Prop - Land & Bldg	-		-			
Total of 454 Accounts		1,636,552		1,636,552			
Total 450-451-454		3,121,843		3,121,843			

Acct	Description	Total Company	Power Supply	Distribution	Transmission	Other Trans.	Stranded Costs
456005	PJM ARR Revenue	\$ -	-				
456006	PJM Congestion Credit -FTR	-	-				
456020	Rev other Electric	180,000	180,000				
456028	Other elec rev-PP01 OH Est Reg	-		-			
456050	Revenues -- Other Electric-Sale of Obsolete Invento	-	-	-			
456089	MISO FTR/ARR Revenue	-		-			
456097	Revenues -- ATSI Ground Lease - Assoc Co	1,317,792		1,317,792			
456112	Other Rev Other	-		-			
456122	Sale of Scrap	-		-			
456255	Telecom-Rent-Wireless Leases	-		-			
456268	Assoc co - outside serv	-		-			
456078	Rev-Oth Elec-PJM Non-Firm Point to Point Trnsm Srv	-		-			
Total other revenue accts		1,497,792	180,000	1,317,792			

Penn Power Exhibit TJD-2
Supporting Study No. 10
Line Losses

From Section 6.3 (original page 24) of Penn Power's supplier tariff

6.3 Distribution Real Power Losses for Energy. Losses will be calculated by multiplying the retail Customer(s) load times the applicable real power loss factor specified below:

Service Voltage Level	Cumulative Loss Factor
23 kV to < 69 kV	0.1%
4.1 kV to < 23 kV	3.0%
4.1 kV	6.2%

The Company will revise these line loss factors if PJM imposes or changes any separate charges on its transmission Customers for the level of line losses that is included in these factors. Any such revision will be filed with the FERC and the Commission, provided to EGSs via electronic mail and posting on the Company's website, and become effective thirty (30) days after filing unless otherwise ordered by the Commission or the FERC (or concurrently with any change in or imposition of separate PJM line loss charges, whichever is later). The Company will make a good faith effort to advise EGSs of any change in these loss factors more than thirty (30) days in advance of a change when warranted.

Penn Power Exhibit TJD-2
Supporting Study No. 11
Customer Uncollectible Allocation

Penn Power Study 11 Uncollectible Allocation

RS	\$	3,000,794
GSR	\$	-
GSS	\$	82,230
GSM	\$	79,271
GSL	\$	-
GP	\$	-
OH	\$	-
PNP	\$	-
POL	\$	1,180
STLT	\$	-
GT	\$	2,992

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**PENNSYLVANIA POWER COMPANY
DOCKET NO. R-2016-2537355**

**Direct Testimony
of
Jeffrey L. Adams**

List of Topics Addressed

Cash Working Capital

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3
**DIRECT TESTIMONY
OF
JEFFREY L. ADAMS**

4 **I. INTRODUCTION AND PURPOSE**

5 **Q. Please state your name and business address.**

6 A. My name is Jeffrey L. Adams and my business address is 1310 Fairmont Avenue,
7 Fairmont, West Virginia 26554.

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

9 A. I am employed by FirstEnergy Service Company as a State Regulatory Analyst in the
10 Rates and Regulatory Affairs Department – West Virginia/Maryland.

11 **Q. What are your responsibilities as a State Regulatory Analyst?**

12 A. My duties and responsibilities include analysis of rates and regulatory activities primarily
13 in West Virginia and Maryland as well as regulatory activities throughout the FirstEnergy
14 Corp. (“FirstEnergy”) service territories.

15 **Q. What is your educational background?**

16 A. I am a 1980 graduate of Fairmont State University (then College) with a Bachelor of
17 Science degree in Business Administration and a 1990 graduate of West Virginia
18 Wesleyan College with a Master’s in Business Administration. I am a Certified Public
19 Accountant in West Virginia and a member of the West Virginia Society of Certified
20 Public Accountants. I have been awarded the professional designation Certified Rate of
21 Return Analyst (“CRRA”) by the Society of Utility and Regulatory Financial Analysts.

1 The CRRA designation is awarded based upon experience and successful completion of a
2 written examination. I have been employed by FirstEnergy or its predecessor companies
3 since 1981 when I began my employment with Monongahela Power Company as an
4 Accounting Technician in Plant Accounting. I have worked as an Accountant or Analyst
5 in various departments including Rates and Customer Accounting and as the Staff
6 Assistant to the Controller.

7 **Q. Have you previously testified in Pennsylvania Public Utility Commission**
8 **(“Commission”) proceedings?**

9 A. While I have not testified before this Commission, I have presented testimony on behalf
10 of several other FirstEnergy operating companies before the Public Service Commission
11 of West Virginia, the New Jersey Board of Public Utilities, and the Public Utilities
12 Commission of Ohio.

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

14 A. I am testifying on behalf of Pennsylvania Power Company (“Penn Power” or the
15 “Company”).

16 **Q. Mr. Adams, have you prepared any exhibits to accompany your testimony?**

17 A. Yes. Penn Power Exhibit JLA-1 was prepared by me or under my supervision and is
18 described in detail in my testimony.

19 **Q. What is the purpose of your direct testimony?**

1 A. The purpose of my direct testimony is to describe the process used to determine the total
2 cash working capital requirement of the Company, as shown on page 1 of Exhibit JLA-1.

3 **II. CASH WORKING CAPITAL - OVERVIEW**

4 **Q. Please define “cash working capital” as it pertains to ratemaking.**

5 A. For ratemaking purposes, cash working capital is generally defined as the average
6 amount of capital provided by investors, over and above the investment in plant and other
7 specifically identified rate base items, to bridge the gap between the time expenditures
8 are required to be made by the Company to provide service and the time collections are
9 received for that service from customers. Cash working capital is determined for
10 ratemaking purposes by a lead/lag study.

11 **Q. Please define the terms “lead” and “lag” as used in your testimony and explain how
12 each is calculated.**

13 A. In general, a lead or a lag measures the time that elapses between receipt of a product or
14 service and receipt of compensation by the party providing that product or service. A
15 lead occurs when payment is made in advance of receiving a product or service. A lag
16 occurs when payment for a product or service occurs after the product has been received
17 or service has been rendered. Exhibit JLA-1, page 1, quantifies lead or lag time in days;
18 positive net lags shown in column 9 increase cash working capital while negative net
19 leads shown in column 9 reduce cash working capital.

20 **Q. What time period was used for the Company’s lead/lag study?**

1 A. The individual leads and lags were developed using data for the twelve months ended
2 December 31, 2015. The leads and lags thus developed were applied to the projected
3 financial data for the twelve months ending December 31, 2017.

4 **Q. What was the source of the relevant data used to calculate cash working capital?**

5 A. For the most part, I used financial data for the fully projected future test year that underlie
6 the development of the Company's revenue requirement shown in exhibits accompanying
7 Penn Power Statement No. 2, the direct testimony of Richard A. D'Angelo. However,
8 the determination of cash working capital and the development of revenue requirement
9 are interdependent because changes in cash working capital will affect rate base and net
10 income. Performing the cash working capital and revenue requirement calculations on an
11 iterative basis reduces, but does not eliminate, the impact of that interdependence.
12 Appropriate adjustments to the pro forma distribution revenue, federal and state income
13 taxes, and Pennsylvania gross receipts taxes were made in my cash working capital
14 calculations to account for that interdependence.

15 **Q. Have you prepared a summary showing each of the components that comprise the**
16 **total cash working capital for the Company?**

17 A. Yes, I have. Page 1 of Exhibit JLA-1 shows each component of the total cash working
18 capital requirement. The Revenue Lag of 56.26 days, as shown at line 4, column 7, is a
19 weighted composite of Electric Revenue lag of 56.01, Sales for Resale lag of 15.64, and
20 Other Operating Revenue lag of 80.58. The leads or lags for the various grouping of
21 expenses and taxes are shown in column 8. The net leads or lags, as shown in column 9,
22 are the result of subtracting column 8 from column 7. The net leads or lags are then

1 multiplied by the average daily amounts for each of the various expenses or tax items.
2 The results are added and the sum is the Net Cash Working Capital requirement of
3 \$23,018,000, as shown at line 23, column 10 of Exhibit JLA-1. Interest on Long Term
4 Debt, Interest Expense on Customer Deposits, Prepayments and Unamortized Cash
5 Pension Contributions are also elements of cash working capital, as shown at lines 24-27.
6 The sum of these items brings the Company's Total Cash Working Capital requirement
7 to \$28,906,000, as shown at line 28, column 10 of the lead/lag study summary on Exhibit
8 JLA-1.

9 **Q. How did you calculate the lag associated with Electric Revenue?**

10 A. Payment for electric service occurs after service is provided, which produces a lag in
11 receipt of revenues. To calculate total revenue lag, Electric Revenue lag was calculated
12 separately for the periods: (1) from billing to cash collection ("Collection Lag"); (2)
13 from meter reading to billing ("Billing Lag"); and (3) from the mid-point of the service
14 period to meter reading ("Service Period Lag").

15 **Collection Lag** is the period from mailing a customer's bill until payment is received for
16 that bill. This lag was calculated based on the turnover in accounts receivable. The ratio
17 of accounts receivable to total billed revenues is divided into 365 days to derive the
18 average number of days accounts receivable are outstanding or, in other words, the
19 average time between issuing a bill and collecting a bill. That figure, in days, is the
20 Collection Lag, which is 39.20 days for Penn Power.

1 **Billing Lag** is the period from the reading of a customer's meter until the bill is
2 mailed. Generally, the bill is prepared the same day the meter is read and is
3 mailed the next day. However, there are exceptions. Reading the meters of large
4 industrial customers can take an additional day because there is more work
5 involved given the nature of the service such customers receive. Also, weekends,
6 holidays, and severe weather may add to the time to read and bill customers.
7 Accounting for these exceptions, the Company's Billing Lag is 1.70 days.

8 **Service Period Lag** is measured from the midpoint of the service period to the
9 date a meter is read. The service period lag covers the period in which electric
10 service was rendered, and was calculated using the Company's 2015 Meter
11 Reading work schedule. That schedule shows that meters are typically read or
12 estimated once a month, or twelve times per year, so the average service period
13 was determined to be 30.21 days. The lag from the midpoint of the service period
14 to the meter reading date was calculated to be 15.11 days. This calculation
15 assumes that electric usage is uniform throughout the month.

16 The overall Electric Revenue lag, calculated as the sum of the Collection, Billing
17 and Service Period Lags, as shown on page 2, at line 1 of Exhibit JLA-1, is 56.01
18 days.

19 **Q. How did you calculate the lead or lag associated with Other Operating Revenue?**

20 A. The calculation of the Other Operating Revenue lag is shown on page 2 of Exhibit JLA-1,
21 which lists each of the individual components of Other Operating Revenue and their

1 respective lead or lag. Because late payment charges are included in the accounts
2 receivable used to calculate the Electric Revenue lag, the overall Electric Revenue lag
3 was used for this component of Other Operating Revenues.

4 **Q. Please explain the lead and lag associated with the Company's expenses.**

5 A. The Company tracks the various types of expenses through the use of cost elements.
6 Cost elements are groupings of similar type charges such as energy purchases, payroll,
7 contract labor, labor overheads, expenses for materials and supplies, utilities, taxes, etc.
8 The cost elements are then allocated to the appropriate FERC system of accounts for
9 reporting purposes. The payment patterns of the individual cost elements are used to
10 develop the expense portion of the study. The lags for the cost elements were dollar-
11 weighted to develop weighted lags (expressed in dollar-days) for each FERC account.
12 Through the use of various methods, such as statistical sampling, stratification and
13 percentage of total charges, the study examined a substantial portion of the charges for
14 each cost element to ensure the data developed was reasonable and accurate. The leads
15 and lags for the FERC accounts are shown on page 3 of Exhibit JLA-1. Composite
16 expense lead/lag factors were developed for the expense categories shown on page 1 of
17 Exhibit JLA-1. The development of the composite expense factors are shown on page 3,
18 at lines 3, 41, 46, 52, and 64 of Exhibit JLA-1.

19 **Q. How did you develop the lag in payment of pole rentals made to telecommunications**
20 **companies and the lag in receipt of the rental revenues from those companies?**

21 A. The Company's payments to telecommunications companies for its use of their poles and
22 its receipts from telecommunications companies for their use of its poles are based on

1 contracts. The contracts and actual payment information were analyzed and the lags were
2 developed. The same lags were used for both revenues and expense.

3 **Q. How did you calculate the lag for Uncollectible Accounts expense?**

4 A. The lag for uncollectible accounts has been recognized in the calculation of the
5 Collection Lag. The accounts receivable are reduced when uncollectible accounts are
6 written off, and thus reduces the Collection Lag. To also include a lag for uncollectible
7 accounts expense would lead to a double counting of this component.

8 **Q. How did you calculate the leads and lags associated with Taxes?**

9 A. The weighted average lead or lag for each tax cost element was calculated in the same
10 fashion as cost elements for all other expenses. The individual taxes are listed on page 4
11 of Exhibit JLA-1 for Taxes Other Than Income and page 5 of Exhibit JLA-1 for Federal
12 and State Income taxes. The calculation of each weighted average lead or lag is set forth
13 on those pages. While the individual lags were used for Federal and State Income taxes,
14 a composite weighted lag of (73.56) was developed for Taxes Other Than Income and is
15 shown on page 4, at line 14, in column 2 of Exhibit JLA-1.

16 **Q. Did you reflect the interest expense on customer deposits as a separate item in the**
17 **study?**

18 A. Yes. Interest on customer deposits is reflected in the study as an expense with an average
19 payment lag of 182.5 days (365/2) because such interest is paid annually. Reflecting
20 interest expense on customer deposits with a 182.5 day lag results in a reduction of
21 \$80,000 to cash working capital, as shown on page 1, at line 25, in column 10 of Exhibit

1 JLA-1.

2 **Q. Why did you assign Depreciation, Amortization, Provision for Deferred Income**
3 **Taxes and Investment Tax Credit a zero lag?**

4 A. These are considered non-cash items by the Commission. Therefore, they were not
5 included in calculating the cash working capital requirement, as shown on page 1, at lines
6 10, 11, 17, 18, and 19 of Exhibit JLA-1.

7 **Q. Why are Prepayments included in the Company's cash working capital claim?**

8 A. The Company pays certain costs before they are actually charged to expense for
9 accounting and ratemaking purposes. Prepayments are cash expenditures that, while
10 made in one period, are not charged to expense until a future period due to accrual
11 accounting. The claim for Prepayments is based on a thirteen-month average of the
12 various prepaid items, including Prepaid Commission Assessments, Prepaid Property and
13 Liability Insurance, Prepaid Edison Electric Institute Dues Assessments, and Other
14 Prepaid items, which include rating agency fees, financing fees, line of credit fees, and
15 trustee fees. The detailed calculations of Prepayments are shown on page 6 of Exhibit
16 JLA-1.

17 **Q. Please explain the basis for including Unamortized Cash Pension Contributions in**
18 **the Company's cash working capital claim.**

19 A. In Penelec's 2006 base rate case, the Commission approved the recovery of pension
20 expense calculated on the basis of a ten-year historical average of actual cash
21 contributions. In its Final Order in that case, the Commission stated:

1 “Fundamentally, we believe that, regarding the recovery of pension
2 expense, the alternative method requested by MEPN [the Companies] in
3 this proceeding is fair to both ratepayers and stockholders. The
4 Companies’ normalization methodology will provide a more consistent
5 and less variable expense claim to be included within base rates as
6 compared to the more significant sums contributed in the two years
7 preceding the 2006 test year in this proceeding. Additionally, we should
8 not ignore this significant benefit to current and former employees just
9 because the Companies did not make a contribution to the pension fund
10 during any given year.”¹

11 **Q. How does recovering a cash contribution to the pension plan over a ten-year period**
12 **create a working capital need?**

13 A. The Company has made large cash contributions to its pension trust fund over the last ten
14 years. For ratemaking purposes, the Company recovers those cash outlays over ten years.
15 Throughout those ten years, the Company bore the carrying costs associated with the
16 prior period expenditures that it made but has not recovered in base rates. That
17 unrecovered amount constitutes the Unamortized Cash Pension Contribution that forms
18 the basis for the Company’s claim, as shown on page 7 of Exhibit JLA-1.

19 **Q. Did you consider the effect of the earnings on the pension trust fund in your cash**
20 **working capital claim?**

21 A. Yes. The average earnings on the pension trust fund are reflected in the calculation of the
22 amount of cash contributions and, in that way, reduce the cash contribution. Stated
23 another way, earnings on the cash contributions accrue to the benefit of the fund, reduce
24 the Company’s contribution obligations, and thereby provide an “upfront” benefit to
25 customers.

¹ *Pa. PUC v. Metropolitan Edison Company, Pennsylvania Electric Company*, Docket Nos. R-00061366, *et. al.*, p. 92 (Order entered January 11, 2007).

1 **Q. Was Pension expense included in the Company's cash working capital requirement**
2 **as a component of its lead/lag study?**

3 A. No, it was not. Pension expense is reflected in the cash working capital requirement only
4 once, through the Unamortized Cash Pension Contribution Balance I described above.

5 **III. SUMMARY OF CASH WORKING CAPITAL REQUIREMENTS**

6 **Q. Please summarize your testimony and recommendations.**

7 A. Penn Power has supported a total cash working capital requirement of \$28,906,000, as
8 shown on page 1, at line 28 of Exhibit JLA-1.

9 **Q. Mr. Adams, does this complete your direct testimony?**

10 A. Yes, it does.

Pennsylvania Power Company
Cash Working Capital
Income Statement
For the 12 Months Ending December 31, 2017
 (\$000)

Line No.	Description	Normalized PAPUC Jurisdictional						Daily Amount	Revenue (Lead) / Lag Days (7)	Expense (Lead) / Lag Days (8)	Net (Lead) / Lag Days (9)	Cash Working Capital (10)	Supporting Page of Penn Power Exhibit JLA-1 (11)
		Distribution (1)	Smart Meters (2)	PAPUC Total Distribution (3)	Total Riders (4)	PAPUC Total (5)	Daily Amount (6)						
Operating revenues													
1	Electric Revenues	\$ 118,985	\$ 12,366	\$ 131,351	\$ 179,335	\$ 310,686	851.19	56.01			\$ 47,671	Page 2	
2	Sales for resale	-	-	-	76	76	0.21	15.64			3	Page 2	
3	Other operating revenue	3,196	-	3,196	180	3,376	9.25	80.58			745	Page 2	
4	Total operating revenue	\$ 122,181	\$ 12,366	\$ 134,547	\$ 179,590	\$ 314,137	860.65	56.26			\$ 48,420		
Operating expenses													
5	Price to Compare	\$ -	\$ -	\$ -	\$ 151,782	\$ 151,782	\$415.84	56.26	32.74	23.52	\$ 9,779	Page 3	
6	Distribution	16,772	-	16,772	4,380	21,152	57.95	56.26	34.73	21.53	1,248	Page 3	
7	Customer accounts	4,762	-	4,762	2,477	7,239	19.83	56.26	20.50	35.76	709	Page 3	
8	Customer service & info	5,009	-	5,009	7,342	12,351	33.84	56.26	38.98	17.28	585	Page 3	
9	Admin & gen expense	6,801	3,462	10,264	6,650	16,914	46.34	56.26	12.99	43.27	2,005	Page 3	
10	Depreciation - accrual	20,271	4,116	24,387	-	24,387	46.34	56.26			-	Page 3	
11	Amortization	1,700	-	1,700	(2,053)	(354)					-		
12	Taxes other than income	7,874	729	8,603	10,580	19,183	52.56	56.26	(73.56)	129.82	6,823	Page 4	
13	Operating expense before tax	\$ 63,189	\$ 8,307	\$ 71,496	\$ 181,158	\$ 252,655					\$ 21,149		
14	Operating income before income tax	\$ 58,992	\$ 4,059	\$ 63,050	\$ (1,568)	\$ 61,482							
Income taxes													
15	Federal income tax - current	\$ 14,901	\$ (159)	\$ 14,742	\$ (494)	\$ 14,248	39.04	56.26	40.94	15.31	\$ 598	Page 5	
16	State income tax - current	6,047	(50)	5,997	(157)	5,840	16.00	56.26	(23.19)	79.45	1,271	Page 5	
17	Deferred income tax - federal	5,150	1,201	6,351	-	6,351							
18	Deferred income tax - state	-	-	-	-	-							
19	Investment tax credit	-	-	-	-	-							
20	Total tax expense	\$ 26,099	\$ 991	\$ 27,090	\$ (651)	\$ 26,439					\$ 1,869		
21	Total operating expenses	\$ 89,288	\$ 9,298	\$ 98,586	\$ 180,508	\$ 279,094							
22	Operating income	\$ 32,893	\$ 3,068	\$ 35,961	\$ (917)	\$ 35,043							
23	Net Cash Working Capital										\$ 23,018		
24	Interest on Long Term Debt					\$ 12,150	33.29	56.26	91.25	(34.99)	(1,165)		
25	Interest Expense on Customer Deposits					231	0.63	56.26	182.50	(126.24)	(80)		
26	Prepayments										\$ 504	Page 6	
27	Unamortized Cash Pension Contributions										\$ 6,629	Page 7	
28	Total Cash Working Capital										\$ 28,906		

Pennsylvania Power
 2015 Lead/Lag Study
 Revenue Summary

Line No.	FERC Account	Total Company			
		Total Company Income Statement (1)	Cash Items (2)	Lags/Leads (3)	Dollar Days (4)
1	440 - 444	\$ 250,835,544	\$ 250,835,544	56.01	\$ 14,048,104,364
2	447	159,542	159,542	15.64	2,494,738
3		\$ 250,995,086	\$ 250,995,086	55.98	\$ 14,050,599,102
	TOTAL Revenues Net of Prov. for Refunds				
4	450	\$ 881,983	\$ 881,983	56.01	\$ 49,395,658
5	451	827	568,445	43.71	24,844,166
6	454	2,097,807	2,081,176	163.13	339,501,221
7	456	1,495,709	1,357,153	(13.12)	(17,811,388)
8	456.1	30,541	30,541	15.89	485,371
9		\$ 4,506,867	\$ 4,919,299	80.58	\$ 396,415,028
10		\$ 255,501,953	\$ 255,914,385	56.45	\$ 14,447,014,130

(1) Amounts from Penn Power 2015 FERC Form 1 (Page 300)

Pennsylvania Power
2015 Lead / Lag Study
Expense Summary

FERC Account	FERC Description	Amount (1)	Cash Items (2)	Lead (3)	Dollar Days (4)	Composite Factors (5)
555	Purchased Power	\$ 131,916,805	131,936,592	32.74	4,320,116,305	
557	Other Expenses	27,030	26,673	27.12	723,491	32.74
560	Operation Supervision and Engineering	290	284	23.08	6,556	
561.4	Scheduling, System Control and Dispatch Services	90,096	90,096	28.22	2,542,274	
561.8	Reliability, Planning and Standards Development Services	1,141	1,141	27.74	31,662	
562	Station Expenses	1,913	1,872	13.38	25,041	
563	Overhead Lines Expenses	3,327	3,256	13.38	43,563	
565	Transmission of Electricity by Others	4,738,814	4,738,814	30.27	143,450,253	
566	Miscellaneous Transmission Expenses	31,305	31,168	26.61	829,316	
567	Rents	0	-	-	-	
568	Maintenance Supervision and Engineering	8,673	8,673	24.68	214,065	
569.1	Maintenance of Computer Hardware	2,430	2,430	22.87	55,565	
569.2	Maintenance of Computer Software	17,423	17,423	22.87	398,431	
569.3	Maintenance of Communication Equipment	15,680	15,680	23.04	361,238	
570	Maintenance of Station Equipment	34,980	14,796	7.88	116,535	
571	Maintenance of Overhead Lines	78,945	72,477	26.56	1,925,126	
573	Maintenance of Miscellaneous Transmission Plant	(680)	28,265	35.10	991,972	
575.7	Market Facilitation, Monitoring and Compliance Services	11,801	11,801	27.88	328,967	
580	Operation Supervision and Engineering	6,991	6,594	19.02	125,416	
582	Station Expenses	28,518	12,238	16.04	196,305	
583	Overhead Line Expenses	84,305	83,625	47.10	3,938,521	
584	Underground Line Expenses	180,736	180,103	46.21	8,322,107	
586	Meter Expenses	70,654	67,957	22.07	1,500,115	
588	Miscellaneous Expenses	(678,993)	1,122,070	24.19	27,145,023	
589	Rents	355,110	352,201	144.19	50,784,892	
590	Maintenance Supervision and Engineering	120,273	120,179	32.53	3,909,136	
592	Maintenance of Station Equipment	851,632	762,872	18.03	13,756,435	
593	Maintenance of Overhead Lines	9,789,770	9,115,724	35.40	322,671,584	
594	Maintenance of Underground Lines	457,815	347,745	18.63	6,479,410	
595	Maintenance of Line Transformers	15,373	15,373	23.34	358,826	
596	Maintenance of Street Lighting and Signal Systems	244,158	190,322	16.64	3,167,149	
597	Maintenance of Meters	555,398	481,817	17.53	8,447,012	
598	Maintenance of Miscellaneous Distribution Plant	361,511	621,828	27.91	17,355,699	34.73
901	Supervision	1	1	46.07	34	
902	Meter Reading Expenses	1,518,786	1,509,349	26.07	39,349,130	
903	Customer Records and Collection Expenses	1,913,506	1,872,388	15.39	28,825,210	
904	Uncollectible Accounts	3,074,380	-	-	-	
905	Miscellaneous Customer Accounts Expenses	131,935	128,842	29.50	3,801,477	20.50
908	Customer Assistance Expenses	8,149,409	4,585,046	37.74	173,030,466	
909	Informational and Instructional Expenses	42,383	42,383	40.41	1,712,499	
910	Miscellaneous Customer Service and Informational Expenses	1,365,088	1,365,088	43.31	59,123,589	
911	Supervision	2,756	2,756	46.21	127,341	
913	Advertising Expenses	8,059	8,059	1.76	14,199	38.98
920	Administrative and General Salaries	(231,985)	70,214	(0.15)	(10,685)	
921	Office Supplies and Expenses	519,084	741,306	(127.33)	(94,388,969)	
922	Administrative Expenses Transferred - Credit	(3,450,740)				
923	Outside Services Employed	9,882,471	9,791,850	35.72	349,762,259	
924	Property Insurance	25,355	26,288	(165.86)	(4,360,201)	
925	Injuries and Damages	228,819	226,960	15.74	3,573,455	
926	Employee Pensions and Benefits	4,421,026	(498,974)	85.53	(42,675,516)	
928	Regulatory Commission Expenses	724,133	724,133	(82.57)	(59,793,271)	
930.1	General Advertising Expenses	16,671	16,154	6.44	104,079	
930.2	Miscellaneous General Expenses	(54,210)	161,742	(50.23)	(8,124,838)	
931	Rents	138,562	138,032	5.39	744,556	
935	Maintenance of General Plant	228,428	206,890	28.74	5,946,405	12.99
Totals ⁽¹⁾		\$ 178,077,137	\$ 171,600,597	31.45	\$ 5,397,079,211	

⁽¹⁾ Amounts from Penn Power 2015 FERC Form 1 (Pages 320 -323)

Pennsylvania Power
 2015 Lead / Lag Study
 Taxes Other Than Income

Line No.	Cost Element	Cost Element Description	Amount ⁽¹⁾	Lead/Lag	% of Charges Reviewed	Cash Items	Dollar Days	Total Company	
								(1)	(2)
1	408100	FICA	\$ 1,398,362	9.92	100.45%	\$ 1,398,362	\$ 13,873,541		
2	408101	Federal Unemployment	8,670	(161.64)	99.97%	8,670	(1,401,403)		
3	408103	PA Unemployment	64,901	(156.73)	100.00%	64,901	(10,171,760)		
4	408105	PA Gross Receipts	8,200,557	(82.18)	100.00%	8,200,557	(673,944,185)		
5	408107	PA Public Utility Realty	290,000	(63.00)	100.00%	290,000	(18,270,000)		
6	408111	PA Capital Stock	50,263	43.46	100.00%	50,263	2,184,341		
7	408114	Sales and Use	408	18.48	100.00%	408	7,539		
8	408140	PA Local Realty Tax	62,183	9.59	100.00%	62,183	596,284		
9	408142	Ohio Property Tax	5,709	(74.16)	100.00%	5,898	(437,398)		
10	408151	Federal Highway Use	716	(186.50)	100.00%	716	(133,534)		
11	108152	Federal Excise Tax	12,149	55.44	100.00%	12,149	673,508		
12	408172	PA Gross Receipts	6,429,402	(82.18)	100.00%	6,429,402	(528,385,827)		
13			\$ 16,523,320	(73.56)	100.00%	\$16,523,508	\$ (1,215,408,894)		

(1) Amounts from Penn Power 2015 FERC Form 1 (Page 114 Line 14)
 Details in Penn Power 2015 FERC Form 1 (Pages 262 -263)

Pennsylvania Power
 2015 Lead / Lag Study
 Income Taxes

Line No.	Cost Element	Cost Element Description	Total Company				
			Amount ⁽¹⁾ (1)	Lead/Lag (2)	% of Charges Reviewed (3)	Cash Items (4)	Dollar Days (5)
1	409100	Income Taxes - Utility Oper Inc - Federal -Current	\$ 1,479,358	40.94	100.00%	\$ 1,479,358	\$ 60,571,948
2							
3	409146	Income Taxes - Utility Oper inc - St - PA - Current	1,581,537	(23.19)	100.00%	1,581,537	(36,671,889)
4							
5							
6							
7	Totals		\$ 3,060,895	7.81	100.00%	\$ 3,060,895	\$ 23,900,059

(1) Amounts from Penn Power 2015 FERC Form 1 (Page 114 Lines 15 and 16)

**Pennsylvania Power Company
 Cash Working Capital
 Calculation of 13 Month Average Prepayments**

(\$000)

Line No.	Year	Month	Prepaid Commission Assessment (1)	Prepaid Property and Liability Insurance (2)	Prepaid EEL Dues Assessment (3)	Other Prepaid (4)	Total (5)
1	2014	December	\$ 316	\$ 110	\$ -	\$ 39	\$ 465
2	2015	January	263	91	28	28	410
3		February	210	82	26	7	325
4		March	158	72	23	4	257
5		April	105	85	21	2	213
6		May	53	67	18	3	141
7		June	-	83	15	53	151
8		July	-	169	13	40	222
9		August	-	155	10	52	217
10		September	658	137	8	54	857
11		October	527	142	5	41	715
12		November	461	123	3	46	633
13		December	1,391	501	-	54	1,946
14		Total	<u>\$ 4,142</u>	<u>\$ 1,817</u>	<u>\$ 170</u>	<u>\$ 423</u>	<u>\$ 6,552</u>
15	Thirteen Month Average Balance		\$ 319	\$ 140	\$ 13	\$ 33	\$ 504
16	Eliminate FERC Jurisdictional (a)			\$ -	\$ -	\$ -	-
17	Amount Allocated to Distribution (Line 15 - Line 16)						<u>\$ 504</u>

Footnote

(a) 0.00% of the Thirteen Month Average Balance was allocated to Transmission -FERC Jurisdiction based on the allocation factor of Distribution Plant.

	1 165307	2 165408	3 165440	4=5-1-2-3	5 165000-165999	
December-14	315,725.02	110,444.10		38,830.01	464,999.13	0.00
January-15	263,104.19	90,867.83	28,209.41	27,811.60	409,993.03	0.00
February-15	210,483.36	81,671.42	25,644.92	6,668.18	324,467.88	0.00
March-15	157,862.53	71,735.29	23,080.43	3,524.77	256,203.02	0.00
April-15	105,241.70	84,876.75	20,515.94	1,551.24	212,185.63	0.00
May-15	52,620.87	66,719.46	17,951.45	3,351.27	140,643.05	0.00
June-15		83,231.13	15,386.96	52,883.61	151,501.70	0.00
July-15		168,934.49	12,822.47	40,338.32	222,095.28	0.00
August-15		155,403.32	10,257.98	51,643.03	217,304.33	0.00
September-15	658,484.96	136,882.89	7,693.49	53,947.74	857,009.08	0.00
October-15	526,788.00	142,124.50	5,129.00	41,402.45	715,443.95	0.00
November-15	460,939.50	123,239.55	2,564.51	45,957.16	632,700.72	0.00
December-15	1,390,989.00	500,601.55		54,001.47	1,945,592.02	

**Pennsylvania Power Company
 Cash Working Capital
 Unamortized Cash Pension Contribution Balance
 (\$000)**

<u>Line No.</u>	<u>Payment Date</u>	<u>O&M Payment Amount</u>	<u>Amortization End Date</u>	<u>Months Remaining at 12/31/2017</u>	<u>Unamortized Balance</u>
		(1)		(2)	(3) = (1) * ((2)/120)
1	9/2/2009	7,123	9/30/2019	21	1,247
2	3/30/2011	1,730	3/31/2021	40	577
3	5/1/2016	5,653	5/31/2026	102	4,805
		<u>\$ 14,506</u>			<u>\$ 6,629</u>

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**PENNSYLVANIA POWER COMPANY
DOCKET NO. R-2016-2537355**

**Direct Testimony
of
Laura W. Gifford**

List of Topics Addressed

**Uncollectible Accounts Expense
Smart Meter Revenue Requirements
Smart Meter Cost Savings Baselines**

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1
2
3

**DIRECT TESTIMONY
OF
LAURA W. GIFFORD**

4 **I. INTRODUCTION AND BACKGROUND**

5 **Q. Please state your name and business address.**

6 A. My name is Laura W. Gifford. My business address is 2800 Pottsville Pike, Reading,
7 Pennsylvania 19605.

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

9 A. I am employed by FirstEnergy Service Company as a Rate Analyst V in the Rates and
10 Regulatory Affairs Department – Pennsylvania.

11 **Q. What are your responsibilities as a Rate Analyst V?**

12 A. Generally, the Rates and Regulatory Affairs Department provides regulatory support for
13 Pennsylvania Power Company (“Penn Power” or “Company”) and its affiliated
14 Pennsylvania operating companies (collectively referred to as the “Companies”). I am
15 responsible to the Manager of Rates and Regulatory Affairs -- Pennsylvania for the
16 preparation and coordination of the Companies’ accounting and financial data in all their
17 rate-related matters before the Pennsylvania Public Utility Commission (“PUC” or
18 “Commission”), the New York State Public Service Commission and the Federal Energy
19 Regulatory Commission (“FERC”), including the preparation of statements and reports
20 addressing, among other things, smart meters, energy costs, non-utility generation costs,
21 default service support charges - including uncollectible accounts expense, quarterly
22 earnings, and other financial matters.

1 **Q. What is your educational background and professional experience?**

2 A. I am a graduate of The College of Wooster where I received a Bachelor of Arts degree
3 with a major in Business Economics in 1978. I have over nineteen years of experience
4 with FirstEnergy Corp. and GPU Energy. My work experience is more fully described in
5 Appendix A to this testimony.

6 **Q. Have you previously testified in proceedings before the Commission?**

7 A. Yes. I have previously testified before this Commission, as further outlined in Appendix
8 A.

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

10 A. I am testifying on behalf of Penn Power.

11 **Q. Please describe the purpose of your direct testimony.**

12 A. The purpose of my testimony is: (1) to update the Company's default service-related
13 uncollectible accounts expense amounts recovered in rates; (2) to describe the revenue
14 requirement baseline associated with smart meters in distribution base rates for
15 determining when the Company's Smart Meter Technologies Charge ("SMT-C") Rider
16 would be used to recover costs; and (3) to update cost baselines for determining savings
17 resulting from the deployment of smart meters.

18 **Q. Have you prepared any exhibits to accompany your testimony?**

19 A. Yes. Penn Power Exhibit LWG-1, Penn Power Exhibit LWG-2 and Penn Power Exhibit
20 LWG-3 were prepared by me or under my supervision and are described in detail later in
21 my testimony.

1 **II. UNCOLLECTIBLE ACCOUNTS EXPENSE**

2 **Q. Has Penn Power’s uncollectible accounts expense associated with the provision of**
3 **default generation service been unbundled?**

4 A. Yes. In accordance with the Commission’s Final Order in the Penn Power Default
5 Service Program (“DSP”) proceeding at Docket No. P-2010-2157862, Penn Power fully
6 unbundled uncollectible accounts expense associated with default service for residential,
7 commercial and industrial customers. Specifically, in 2011 the unbundled uncollectible
8 accounts expense associated with default service and electric generation supplier (“EGS”)
9 service was removed from distribution rates and was thereafter recovered through Penn
10 Power’s Default Service Support (“DSS”) Rider on a non-bypassable, non-reconcilable
11 basis. As part of that proceeding, Penn Power also established a Purchase of Receivables
12 (“POR”) program for its residential and small commercial customers. Today, consistent
13 with the Commission’s April 9, 2015 Final Order in the Company’s most recent
14 distribution base rate proceeding at Docket No. R-2014-2428744, the uncollectible
15 accounts expense associated with default service for industrial customers is collected
16 through the Hourly Pricing Default Service (“HP”) Rider.

17 **Q. Are any changes required in this proceeding to update the uncollectible accounts**
18 **expense collected in the Company’s DSS Rider for residential and commercial**
19 **customers and the HP Rider for industrial customers?**

20 A. Yes. Because the Company has included a claim for uncollectible accounts expense with
21 this rate filing based on data for the fully projected future test year (“FPFTY”) ending
22 December 31, 2017, that amount will need to be unbundled to determine what portion of
23 the expense should remain in distribution base rates, what portion should be included in

1 the DSS Rider for residential and commercial customers, and what portion should be
2 included in the HP Rider for industrial customers.

3 **Q. Please explain the methodology used to calculate the updated uncollectible accounts**
4 **expense in the DSS Riders and HP Rider.**

5 A. To determine an appropriate amount of uncollectible accounts expense, I first calculated
6 the ratio of: (1) the default service revenue budgeted for the FPFTY, plus the projected
7 revenues billed to customers on behalf of EGSs for that same time period; to (2) the total
8 retail revenue in the FPFTY ending December 31, 2017, plus the projected revenues
9 billed to customers on behalf of EGSs. I then multiplied this ratio by the total
10 uncollectible accounts expense budgeted for the FPFTY, yielding the default service-
11 related uncollectible accounts expense. This total Company amount of default service-
12 related uncollectible accounts expense was then allocated to the residential, commercial
13 and industrial customer classes based on the weighted average of uncollectible write-offs
14 over a two-year period, January 2014 through December 2015. The customer class
15 allocated amount was then divided by projected kWh for that customer class to determine
16 the appropriate rate.

17 The calculation of the uncollectible accounts expense components of the DSS Rider rates
18 and HP Rider rates are shown in Penn Power Exhibit LWG-1 and rates are reflected in
19 Riders I – HP Rider and J – DSS Rider in Penn Power Company Exhibit 1.

20 **Q. Where can the total uncollectible accounts expense amounts for the FPFTY be**
21 **found?**

1 A. The budgeted uncollectible accounts expense for the FPFTY is set forth in FERC
2 Account No. 904, as shown in Attachment A to Penn Power Exhibit RAD-55 which is
3 being sponsored by Mr. Richard A. D'Angelo as discussed in Penn Power Statement No.
4 2.

5 **Q. What is contained in Penn Power Exhibit LWG-2?**

6 A. Penn Power Exhibit LWG-2 provides a summary of the unbundling of uncollectibles.
7 The exhibit shows the separation of the total uncollectible accounts expense between
8 default service-related and distribution based on the calculations contained in Penn Power
9 Exhibit LWG-1.

10 **Q. Please explain what is shown in Penn Power Exhibit LWG-2.**

11 A. Column 1, line 1 shows the total amount of uncollectible account expense in the FPFTY
12 budget. Line 2 shows the amount of uncollectibles attributed to default service as
13 calculated in Penn Power Exhibit LWG-1, line 7. Line 3 shows the uncollectible
14 accounts expense included in total distribution, as reflected in Penn Power Exhibit RAD-
15 2, page 1, column 4, line 9. Column 2, line 2 reflects the amount of default service-
16 related uncollectibles in the DSS and HP Riders, per budget. Column 3, lines 2 and 3
17 show the amount of uncollectibles to be shifted from base rates to the Company's DSS
18 and HP Riders.

1 **III. SMART METER REVENUE REQUIREMENTS**

2 **Q. What did Penn Power do in its last general rate cases relative to the costs**
3 **attributable to its Commission-approved Revised Smart Meter Deployment Plan?**

4 A. Penn Power rolled the smart meter costs budgeted for recovery through its adjusted SMT-
5 C Rider for the twelve months ending April 30, 2016 into the determination of their
6 distribution rate revenue requirement rather than continuing to collect those costs in the
7 Company's existing SMT-C Rider. The inclusion of smart meter costs in the Company's
8 base rates was approved by the Commission in its Final Order entered at Docket No. R-
9 2014-2428744 and the smart meter rate in the Company's SMT-C Rider was set to zero
10 effective May 3, 2015. The SMT-C Rider will again be used when smart meter revenue
11 requirements exceed the amount rolled into distribution base rates or when billable
12 savings are achieved.

13 **Q. Has the smart meter revenue requirement currently reflected in base rates been**
14 **exceeded or has Penn Power achieved billable savings to date?**

15 A. No. The revenue requirement for smart meters included in base rates has not been
16 exceeded and billable savings have not yet been achieved. Therefore, the SMT-C Rider
17 rates continue to be set at zero for Penn Power.

18 **Q. What is Penn Power proposing in this proceeding relative to the costs attributable to**
19 **its Commission-approved Revised Smart Meter Deployment Plan?**

20 A. The Company is proposing to include the smart meter rate base, revenues and costs for
21 the FPPTY in this case (i.e., the twelve months ending December 31, 2017) in the
22 determination of its distribution rate revenue requirements rather than collecting the costs

1 through the Company's existing SMT-C Rider. Consequently, the Company's SMT-C
2 Rider rates will remain at zero until smart meter revenue requirements exceed the amount
3 rolled into distribution base rates or when billable savings are achieved. This approach
4 mirrors that which was adopted in the Company's most recent base rate proceeding at
5 Docket No. R-2014-2428744.

6 **Q. Where can Penn Power's smart meter revenue requirements be found?**

7 A. Penn Power's smart meter revenue requirements for the FPPTY, totaling \$12.4 million,
8 are identified on page 5 of Penn Power Exhibit RAD-2 presented by Mr. D'Angelo.

9 **Q. How will the Company recover smart meter costs attributable to prior over and**
10 **under-collections?**

11 A. The Company anticipates that the distribution base rates established in this proceeding
12 will become effective in January 2017. The SMT-C rate for Penn Power will continue to
13 be set at zero. The over or under collection balances from the reconciliation process
14 through June 30, 2015 will continue to be held on the Company's books, with interest,
15 until such time that a Company reactivates the SMT-C Rider rate, which, as previously
16 noted, will occur when either smart meter revenue requirements exceed the amount rolled
17 into distribution base rates or when billable savings are achieved. Once the revenue
18 requirement threshold is exceeded and the Company begins deferring costs in excess of
19 that amount, the Company will file SMT-C Rider rates annually on August 1 thereafter
20 with a determination of whether there will be an incremental SMT-C rate for the
21 following calendar year.

1 **IV. SMART METER COST SAVINGS BASELINES**

2 **Q. Will Penn Power measure savings achieved from the deployment of smart meters**
3 **and flow those savings to customers through the SMT-C Rider?**

4 A. Yes. In its most recent base rate proceeding, Penn Power established baseline smart
5 meter costs for nine different categories: (1) meter reading; (2) meter services; (3) back
6 office; (4) contact center; (5) reduction in theft of service; (6) revenue enhancements; (7)
7 avoided capital costs; (8) distribution operations; and (9) load research. The baselines
8 were set as of April 30, 2016 (the end of the FPFTY for that proceeding) with the
9 exception of avoided capital costs, which were measured using a March 31, 2014
10 baseline. The Company is proposing to update these nine cost baselines, as shown in
11 Penn Power Exhibit LWG-3, as of December 31, 2017 using cost data for the FPFTY
12 utilized in this proceeding.

13 **Q. How will cost savings resulting from the deployment of smart meters be identified**
14 **and flowed through to customers?**

15 A. Penn Power expects to begin realizing savings from the use of smart meters sometime
16 after the beginning of 2017, i.e., when the first smart meters are expected to become
17 operational. Any savings from the cost baselines established in the Company's most
18 recent base rate proceeding that are expected to be experienced through the end of the
19 FPFTY (December 31, 2017) are reflected in the cost data used to establish revenue
20 requirements in this proceeding and therefore have been rolled into the proposed base
21 rates. This is why the Company is proposing to update the smart meter cost baselines as
22 of the end of the FPFTY. Once the updated baseline costs are established and approved

1 by the Commission, any cost savings moving forward would be reflected as an offset to
2 the costs included in the Penn Power SMT-C Rider.

3 **Q. How did Penn Power determine the cost baseline for each of the nine categories?**

4 A. The Company utilized the same methodology used to develop baselines for the same
5 categories in its last base rate proceeding, and simply updated those figures to reflect
6 FPFTY cost levels. The details are provided below:

7 *Meter Reading.* The Company developed this proposed baseline from which to track
8 savings by identifying the following: (i) labor costs, which include headcount, salary,
9 overtime benefits and taxes; (ii) meter reader reductions due to attrition and retirement;
10 (iii) total severance costs; (iv) total cost of uniform supplies; (v) fleet costs, which
11 include lease, license, direct parts and labor, indirect parts and labor, and fuel; (vi) the
12 estimated expense of personal mileage; (vii) handheld costs, which include both
13 maintenance and replacement costs; and (viii) the cost of claims.

14 *Meter Services.* The Company developed this proposed baseline by identifying the
15 following: (i) labor costs-original roles, which include headcount, salary, overtime
16 benefits and taxes; (ii) total severance costs; (iii) total cost of uniform supplies; (iv) fleet
17 costs, which include lease, license, direct parts and labor, indirect parts and labor, and
18 fuel; (v) original tablet costs, which include both maintenance and replacement costs; (vi)
19 new device costs; (vii) staff retraining costs; and (viii) labor costs-new roles, which
20 include headcount, salary, overtime benefits and taxes.

1 **Back Office.** The Company developed this proposed baseline by identifying the
2 following: (i) labor costs, which include headcount and salary, and severance costs; and
3 (ii) staffing updates.

4 **Contact Center.** The Company developed this proposed baseline by identifying the
5 following: (i) labor costs, which include headcount and salary; and (ii) staffing updates.

6 **Reduction in Theft of Service.** Revenues recovered due to the detection of theft of
7 service currently are not separately recorded on the Company's books. If the Company is
8 successful in recovering any revenues as a result its efforts, they are booked as retail
9 revenues. Therefore, the baseline for this category is zero. When the Company records
10 any such revenues, they will be flowed to customers as an offset to costs recovered
11 through the SMT-C Rider.

12 **Revenue Enhancements.** This category refers to a reduction in the lag between the time
13 a meter is read and when a bill is produced. The Company currently recognize a 1.5 day
14 lag, as explained by Jeffrey L. Adams in Penn Power Statement No. 5. Because smart
15 meters could possibly reduce this lag, a baseline cost associated with this 1.5 day delay
16 has been established for purposes of measuring savings.

17 **Avoided Capital Costs.** This category refers to the costs of legacy meters and certain
18 handheld equipment used for meter reading that the Company no longer experiences as
19 such meters and equipment are replaced with smart meters. The Company switched out
20 all legacy meters for smart meters in material and supply inventories by December 2015.
21 Therefore, any savings associated with avoided capital costs are being recognized as part
22 of the revenue requirements in this case.

1 ***Distribution Operations.*** This category refers to the costs associated with sending a
2 utility crew to a customer’s location in response to a customer reported power outage.
3 Smart meters are expected to reduce the number of these “truck rolls” by allowing the
4 Company to remotely determine whether the smart meter at the customer’s location still
5 has power. If the smart meter still has power, the problem is likely on the customer side
6 of the meter and a truck roll may be avoided entirely. The Company does not currently
7 track, and has not separately budgeted for, costs associated with truck rolls where the
8 problem turns out to be on the customer side of the meter. Therefore, the Company is
9 utilizing a baseline of zero. The Company will track the number of truck rolls avoided as
10 a result of the deployment of smart meters and will determine cost savings by looking at
11 vehicle fuel expense and line department employee payroll, including overtime and
12 training expenses.

13 ***Load Research.*** This category refers to a statistical sampling of customers with
14 specialized interval meters that provide information that enables the Company to
15 determine appropriate load shapes for each customer class. The Company is not
16 currently conducting such work and, therefore, no load research costs are included in the
17 budget. However, there are interval meters in the field that are capable of being used for
18 load research and it is the cost of those existing load research meters that are in the
19 baseline.

20 **Q. When will measured savings be included in the SMT-C Rider?**

21 A. The savings will be included in the Penn Power SMT-C Rider once they are substantial
22 enough. The Company will measure savings on a monthly basis, accumulate those

1 amounts, during each reconciliation year, and include them either in the form of a
2 negative SMT-C rate or as an offset to costs in the SMT-C rates to be filed August 1 and
3 effective the following January.

4 **Q. What do you mean that the savings must be “substantial enough”?**

5 A. Penn Power residential, commercial and industrial SMT-C rates are billed on a twelve-
6 month average meter count. The billing system can bill rates down to one hundredth of a
7 cent; therefore, the amount of savings must be at least twelve cents per customer in order
8 to be billable.

9 **Q. Will incremental smart meter costs or savings be included in the SMT-C Rider on a
10 permanent basis?**

11 A. No. During future base rate proceedings, the Company will propose to move the
12 recovery of any incremental costs or savings from the SMT-C Rider to base distribution
13 rates.

14 **Q. Does this conclude your direct testimony?**

15 A. Yes, it does.

Resume: Education and Experience of Laura W. Gifford

Education:

- 1978 Bachelor of Arts Degree in Business Economics – The College of Wooster, Wooster, Ohio
- 1999 – Present Various utility industry conferences and seminars addressing issues in the areas of Utility Finance, Electric Utility Operations, Rate Design, FERC Organization, Transmission Pricing and Finance Technical Skills

Experience:

- 7/78 – 7/79 Trust Accountant – Union Commerce Bank, Cleveland, Ohio
- 5/79 – 5/82 New Business and Pension Coordinator – Connecticut General Life Insurance Company/CIGNA, Buffalo, NY
- 9/92 – 10/94 Office Manager – Southeastern Berks Internal Medicine Associates, Reading, PA
- 10/94 – 2/97 Senior Customer Service Representative/Medical Claims Processor – AETNA Life Insurance Company, Reading, PA
- 2/97 – Present Customer Service Representative – Customer Service Department, FERC Rate Analyst, Rate Analyst, State Regulatory Analyst in various capacities and levels – Rates and Regulatory Affairs – Pennsylvania, GPU Energy/FirstEnergy Service Company, Reading, PA

Prepared and presented testimony in the following rate-related cases:

PA PUC Cases: Docket Nos.	R-00016219
	R-00016220
	C-20028926
	M-2008-2041151
	M-2008-2041153
	M-2008-2041167
	M-2008-2041169
	M-2008-2036188
	M-2009-2105616
	M-2009-2105619
	P-2010-2157862
	M-2010-2180408
	M-2010-2180413
	M-2011-2241863
	M-2011-2241892
	M-2012-2303491
	M-2012-2303492
	M-2012-2303487
	M-2013-2341990

M-2013-2341991
M-2013-2341993
M-2013-2341994
R-2014-2428742
R-2014-2428743
R-2014-2428744
R-2014-2428745

Assisted in development and preparation in the following rate related cases

PA PUC Cases: Docket Nos.	R-00061366
	R-00061367
	R-00016851C001
	R-00016852C0001
	R-00016853C0001
	P-00062235
	P-00072259
	P-2008-2020257
	P-2008-2036197
	P-2008-2036188
	P-2009-2093053
	P-2009-2093054
	A-2010-2176520
	A-2010-2176732
	P-2011-2273650
	P-2011-2273668
	P-2011-2273669
	P-2011-2273670
	P-2013-2341991
	P-2013-2341993
	P-2013-2341994
	P-2013-2351260
	P-2015-2511333
	P-2015-2511351
	P-2015-2511355
	P-2015-2511356
	A-2015-2488903
	A-2015-2488904
	A-2015-2488905
NY PSC Cases: Case Nos.	11-E-0594
	13-E-0067
FERC Cases: Docket Nos.	ER99-3393-000
	ER00-3567-000
	EL-88-000

Pennsylvania Power Company
Default Service Support Charge Rider / Hourly Pricing Default Service Rider
 Default Service Related Uncollectible Accounts Expense
 Based on 12 months ending December 31, 2017
 (000's)

Line No.	Description	DSS Rider		HPS Rider Industrial (3)	Total Company (4)
		Residential (1)	Commercial (2)		
1	Total Company Revenue and billed EGS revenue at December 31, 2017			\$	347,617
2	Default Service Revenue at December 31, 2017				157,310
3	Residential and Commercial Generation Revenues billed for EGSs at December 31, 2017				<u>74,092</u>
4	Total Generation and Transmission Revenues (line 2 + line 3)			\$	231,402
5	Percentage of Generation/Transmission Revenue to Total Revenue (line 4 / line 1)				67%
6	Uncollectible Accounts Expense at December 31, 2017				<u>3,697</u>
7	Default Service Related Uncollectible Accounts Expense at December 31, 2017 (line 5 X line 6)			\$	2,477
8	Allocation of Default Service Related Uncollectible Accounts Expense to Rate Classes (A)	95.93%	4.00%	0.08%	100.00%
9	Default Service Related Uncollectible Accounts Expense by Customer Class (Line 7 X Line 8)	\$ 2,376	\$ 99	\$ 2	2,477
10	kWh at December 31, 2017	<u>1,531,854</u>	<u>1,294,624</u>	<u>1,667,084</u>	4,493,562
11	Default Service Related Uncollectible Accounts Expense (line 9 / line 10)	<u>0.15511</u>	<u>0.00765</u>	<u>0.00011</u>	cents per kWh

(A) Allocated based on a 2 year average of net write offs.

Penn Power Company

Unbundled Uncollectible Accounts Expense

<u>Line No.</u>	<u>Description</u>	<u>Unbundled Uncollectibles in FPFTY</u> (1)	<u>Per Budget Uncollectibles in DSS/HP Riders in FPFTY</u> (2)	<u>Adjustment to Uncollectibles in Base Rates and DSS/HP Riders</u> (3) = (1) - (2)
1	Total Uncollectible Accounts Expense in FERC Acct. 904 (Met-Ed Exhibit RAD-55)	\$ 3,697	\$ 3,697	
2	Default Service related uncollectible accounts expense (Met-Ed Exhibit LWG-1, line 7)	\$ 2,477	\$ 900	\$ 1,577
3	Uncollectible accounts expense in Distribution base rates	\$ 1,220	\$ 2,797	\$ (1,577)

Pennsylvania Power Company

**Cost Baseline for Savings as a Result of the Deployment of Smart Meters
At December 31, 2017**

<u>Line No.</u>	<u>Description</u>	<u>Penn Power</u>
1	Meter reading (Page 2)	\$ 1,189,216
2	Meter services (Page 4)	766,727
3	Back-office (Page 6)	180,709
4	Contact Center (Page 8)	581,572
5	Theft of service reduction	0
6	Revenue enhancement (Page 10)	130,000
7	Avoided capital costs (Page 10)	0
8	Distribution operations	0
9	Load research (Page 11)	<u>361</u>
10	Total	<u>\$ 2,848,585</u>

**Meter Reading
 Cost Baseline for Smart Meter Benefit
 For the Twelve Months Ending December 2017**

Line No.

<u>Total Meter Reading Costs</u>		<u>Total</u>
1	<i>Met-Ed</i>	\$ 7,187,146
2	<i>Penelec</i>	\$ 5,812,481
3	<i>Penn Power</i>	\$ 1,189,216
4	<i>West Penn Power</i>	\$ 8,157,704

<u>Labor Costs</u>		<u>Headcount</u>	<u>Salary</u>	<u>Severance Costs</u>
5	<i>Met-Ed</i>	79.0	\$ 6,697,022	\$ _____
6	<i>Penelec</i>	64.5	\$ 4,850,440	\$ _____
7	<i>Penn Power</i>	13.0	\$ 1,049,759	\$ _____
8	<i>West Penn Power</i>	99.5	\$ 6,734,332	\$ _____

<u>Meter Reader Reductions</u>		<u>Attrition</u>	<u>Retirement</u>
9	<i>Met-Ed</i>	\$ _____	\$ _____
10	<i>Penelec</i>	\$ _____	\$ _____
11	<i>Penn Power</i>	\$ _____	\$ _____
12	<i>West Penn Power</i>	\$ _____	\$ _____

<u>Uniforms/Supplies</u>		<u>Uniforms/ Supplies Costs</u>
13	<i>Met-Ed</i>	\$ 14,735
14	<i>Penelec</i>	\$ 37,673
15	<i>Penn Power</i>	\$ 60,653
16	<i>West Penn Power</i>	\$ 38,328

<u>Fleet Costs</u>		<u>Fleet Costs</u>	<u>Personal Mileage</u>
17	<i>Met-Ed</i>	\$ 475,388	_____
18	<i>Penelec</i>	\$ 924,368	_____
19	<i>Penn Power</i>	\$ 78,804	_____
20	<i>West Penn Power</i>	\$ 1,385,044	_____

<u>Handheld Costs</u>		<u>Replacement Costs</u>	<u>Maintenance Costs</u>
21	<i>Met-Ed</i>	\$ _____	\$ _____
22	<i>Penelec</i>	\$ _____	\$ _____
23	<i>Penn Power</i>	\$ _____	\$ _____
24	<i>West Penn Power</i>	\$ _____	\$ _____

<u>Claims</u>		<u>Claims Costs</u>
25	<i>Met-Ed</i>	\$ _____
26	<i>Penelec</i>	\$ _____
27	<i>Penn Power</i>	\$ _____
28	<i>West Penn Power</i>	\$ _____

Meter Reading Cost Baseline for Smart Meter Benefit by FERC Accounts For the Twelve Months Ending December 2017
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Line No.

Salary				
<i>Met-Ed</i>				
1	FERC Account	593	Maintenance Overhead Lines	\$ -
2	FERC Account	902	Meter Reading Expense	\$ 5,322,853
3	FERC Account	408.1	Taxes Other than Income Taxes	\$ 410,550
4	FERC Account	926	A&G-Employee Pensions & Benefits	\$ 963,620
5			Total	\$ 6,697,022
6	<i>Penelec</i>			
7	FERC Account	593	Maintenance Overhead Lines	\$ -
8	FERC Account	902	Meter Reading Expense	\$ 3,811,777
9	FERC Account	408.1	Taxes Other than Income Taxes	\$ 293,193
10	FERC Account	926	A&G-Employee Pensions & Benefits	\$ 745,470
11			Total	\$ 4,850,440
12	<i>Penn Power</i>			
13	FERC Account	593	Maintenance Overhead Lines	\$ -
14	FERC Account	902	Meter Reading Expense	\$ 825,293
15	FERC Account	408.1	Taxes Other than Income Taxes	\$ 63,463
16	FERC Account	926	A&G-Employee Pensions & Benefits	\$ 161,004
17			Total	\$ 1,049,759
18	<i>West Penn Power</i>			
19	FERC Account	593	Maintenance Overhead Lines	\$ (682,347)
20	FERC Account	902	Meter Reading Expense	\$ 5,966,688
21	FERC Account	408.1	Taxes Other than Income Taxes	\$ 406,339
22	FERC Account	926	A&G-Employee Pensions & Benefits	\$ 1,043,651
23			Total	\$ 6,734,332
Uniform/Supplies Costs				
<i>Met-Ed</i>				
24	FERC Account	902	Meter Reading Expense	\$ 14,735
<i>Penelec</i>				
25	FERC Account	902	Meter Reading Expense	\$ 37,673
<i>Penn Power</i>				
26	FERC Account	902	Meter Reading Expense	\$ 60,653
<i>West Penn Power</i>				
27	FERC Account	902	Meter Reading Expense	\$ 38,328
Fleet Costs				
<i>Met-Ed</i>				
28	FERC Account	593	Maintenance Overhead Lines	\$ -
29	FERC Account	902	Meter Reading Expense	\$ 475,388
30			Total	\$ 475,388
<i>Penelec</i>				
31	FERC Account	593	Maintenance Overhead Lines	\$ -
32	FERC Account	902	Meter Reading Expense	\$ 924,368
33			Total	\$ 924,368
<i>Penn Power</i>				
34	FERC Account	593	Maintenance Overhead Lines	\$ -
35	FERC Account	902	Meter Reading Expense	\$ 78,804
36			Total	\$ 78,804
<i>West Penn Power</i>				
37	FERC Account	593	Maintenance Overhead Lines	\$ -
38	FERC Account	902	Meter Reading Expense	\$ 1,385,044
39			Total	\$ 1,385,044

Meter Services
Cost Baseline for Smart Meter Benefit
For the Twelve Months Ending December 2017

Line No.

		Total Headcount	Total
<u>Total Meter Services Costs</u>			
1	Met-Ed	37	\$ 3,584,282
2	Penelec	38	\$ 3,552,696
3	Penn Power	9	\$ 766,727
4	West Penn Power	41	\$ 3,667,318

		Headcount	Salary	Severance Costs
<u>Labor Costs - Original Roles</u>				
5	Met-Ed	37	\$ 3,237,739	\$
6	Penelec	38	\$ 3,207,037	\$
7	Penn Power	9	\$ 760,729	\$
8	West Penn Power	41	\$ 3,099,129	\$

		Uniforms/ Supplies Cost
<u>Uniforms/Supplies</u>		
9	Met-Ed	\$ 106,868
10	Penelec	\$ 150,021
11	Penn Power	\$ 5,998
12	West Penn Power	\$ 117,252

		Fleet Costs
<u>Fleet Costs</u>		
13	Met-Ed	\$ 239,675
14	Penelec	\$ 195,639
15	Penn Power	\$ -
16	West Penn Power	\$ 450,937

		Replacement Costs	Maintenance Costs
<u>Original Tablet Costs</u>			
17	Met-Ed	\$	\$
18	Penelec	\$	\$
19	Penn Power	\$	\$
20	West Penn Power	\$	\$

		Costs
<u>New Device Costs</u>		
21	Met-Ed	\$
22	Penelec	\$
23	Penn Power	\$
24	West Penn Power	\$

		Cost
<u>Staff Retraining Costs</u>		
25	Met-Ed	\$
26	Penelec	\$
27	Penn Power	\$
28	West Penn Power	\$

		Headcount	Salary
<u>Labor Costs - New Roles</u>			
29	Met-Ed		\$
30	Penelec		\$
31	Penn Power		\$
32	West Penn Power		\$

Meter Services Cost Baseline for Smart Meter Benefit by FERC Accounts For the Twelve Months Ending December 2017

Line No.				
	Salary			
	<i>Met-Ed</i>			
1	FERC Account	586	Meter Expenses	\$ 1,303,867
2	FERC Account	593	Maintenance of Overhead Lines	-
3	FERC Account	597	Maintenance of Meters	1,303,867
4	FERC Account	408.1	Taxes Other than Income Taxes	189,124
5	FERC Account	920	Admin & Gen Salaries	-
6	FERC Account	926	A&G-Employee Pensions & Benefits	440,881
7			Total	<u>\$ 3,237,739</u>
	<i>Penelec</i>			
8	FERC Account	586	Meter Expenses	\$ 1,284,142
9	FERC Account	593	Maintenance of Overhead Lines	-
10	FERC Account	597	Maintenance of Meters	1,284,142
11	FERC Account	408.1	Taxes Other than Income Taxes	186,411
12	FERC Account	926	A&G-Employee Pensions & Benefits	452,341
13			Total	<u>\$ 3,207,037</u>
	<i>Penn Power</i>			
14	FERC Account	570	Maintenance of Station Equipment	\$ -
15	FERC Account	586	Meter Expenses	-
16	FERC Account	588	Misc Distribution Expenses	-
17	FERC Account	593	Maintenance of Overhead Lines	-
18	FERC Account	597	Maintenance of Meters	600,797
19	FERC Account	408.1	Taxes Other than Income Taxes	46,311
20	FERC Account	920	Admin & Gen Salaries	-
21	FERC Account	926	A&G-Employee Pensions & Benefits	113,621
22			Total	<u>\$ 760,729</u>
	<i>West Penn Power</i>			
23	FERC Account	586	Meter Expenses	\$ 2,414,387
24	FERC Account	593	Maintenance of Overhead Lines	-
25	FERC Account	597	Maintenance of Meters	-
26	FERC Account	408.1	Taxes Other than Income Taxes	193,757
27	FERC Account	926	A&G-Employee Pensions & Benefits	490,984
28			Total	<u>\$ 3,099,129</u>
	Uniform/Supplies Costs			
	<i>Met-Ed</i>			
29	FERC Account	586	Meter Expenses	\$ 53,434
30	FERC Account	597	Maintenance of Meters	53,434
31			Total	<u>\$ 106,868</u>
	<i>Penelec</i>			
32	FERC Account	586	Meter Expenses	\$ 75,010
33	FERC Account	597	Maintenance of Meters	75,011
34			Total	<u>\$ 150,021</u>
	<i>Penn Power</i>			
35	FERC Account	597	Maintenance of Meters	\$ 5,998
36			Total	<u>\$ 5,998</u>
	<i>West Penn Power</i>			
37	FERC Account	586	Meter Expenses	\$ 117,252
38			Total	<u>\$ 117,252</u>
	Fleet Costs			
	<i>Met-Ed</i>			
39	FERC Account	586	Meter Expenses	\$ -
40	FERC Account	593	Maintenance of Overhead Lines	-
41	FERC Account	597	Maintenance of Meters	239,675
42	FERC Account	920	Admin & Gen Salaries	-
43			Total	<u>\$ 239,675</u>
	<i>Penelec</i>			
44	FERC Account	586	Meter Expenses	\$ -
45	FERC Account	593	Maintenance of Overhead Lines	-
46	FERC Account	597	Maintenance of Meters	195,639
47			Total	<u>\$ 195,639</u>
	<i>Penn Power</i>			
48	FERC Account	570	Maintenance of Station Equipment	\$ -
49	FERC Account	588	Misc Distribution Expenses	-
50	FERC Account	593	Maintenance of Overhead Lines	-
51	FERC Account	597	Maintenance of Meters	-
52	FERC Account	920	Admin & Gen Salaries	-
53			Total	<u>\$ -</u>
	<i>West Penn Power</i>			
54	FERC Account	586	Meter Expenses	\$ -
55	FERC Account	593	Maintenance of Overhead Lines	-
56	FERC Account	597	Maintenance of Meters	450,937
57			Total	<u>\$ 450,937</u>

Back Office
Cost Baseline for Smart Meter Benefit
For the Twelve Months Ending December 2017

Line No.

<u>Total Back Office Costs</u>		<u>Headcount</u>	<u>Salary</u>
1	<i>Met-Ed</i>	10	\$ 773,240
2	<i>Penelec</i>	10	\$ 812,509
3	<i>Penn Power</i>	3	\$ 180,709
4	<i>West Penn Power</i>	13	\$ 838,758

<u>Labor Costs</u>		<u>Headcount</u>	<u>Salary</u>	<u>Severance Costs</u>
5	<i>Met-Ed</i>	10	\$ 773,240	\$ -
6	<i>Penelec</i>	10	\$ 812,509	\$ -
7	<i>Penn Power</i>	3	\$ 180,709	\$ -
8	<i>West Penn Power</i>	13	\$ 838,758	\$ -

<u>Staffing Updates</u>		<u>Headcount Reductions</u>
9	<i>Met-Ed</i>	-
10	<i>Penelec</i>	-
11	<i>Penn Power</i>	-
12	<i>West Penn Power</i>	-

Back Office Cost Baseline for Smart Meter Benefit by FERC Accounts For the Twelve Months Ending December 2017
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<u>Line No.</u>		<u>FERC Account</u>	<u>Description</u>	<u>Amount</u>
	Salary			
	<i>Met-Ed</i>			
1	FERC Account	903	Cust Rcrd & Collect Exp	\$ 610,397
2	FERC Account	408.1	Taxes Other than Income Taxes	\$ 47,335
3	FERC Account	926	A&G-Employee Pensions & Benefits	\$ 115,508
4			Total	\$ 773,240
	<i>Penelec</i>			
5	FERC Account	903	Cust Rcrd & Collect Exp	\$ 641,397
6	FERC Account	408.1	Taxes Other than Income Taxes	\$ 49,739
7	FERC Account	926	A&G-Employee Pensions & Benefits	\$ 121,374
8			Total	\$ 812,509
	<i>Penn Power</i>			
9	FERC Account	902	Meter Reading Expense	\$ 99,988
10	FERC Account	903	Cust Rcrd & Collect Exp	\$ 42,852
11	FERC Account	408.1	Taxes Other than Income Taxes	10,560
12	FERC Account	926	A&G-Employee Pensions & Benefits	\$ 27,309
13			Total	\$ 180,709
	<i>West Penn Power</i>			
14	FERC Account	902	Meter Reading Expense	\$ -
15	FERC Account	923	Outside Svcx Employed	662,890
16	FERC Account	408.1	Taxes Other than Income Taxes	49,006
17	FERC Account	926	A&G-Employee Pensions & Benefits	\$ 126,863
18			Total	\$ 838,758

**Contact Center
 Cost Baseline for Smart Meter Benefit
 For the Twelve Months Ending December 2017**

Line No.	<u>Total Contact Center Costs</u>	<u>Headcount</u>	<u>Salary</u>	
1	<i>Met-Ed</i>	44	\$ 1,993,656	
2	<i>Penelec</i>	46	\$ 2,094,519	
3	<i>Penn Power</i>	13	\$ 581,572	
4	<i>West Penn Power</i>	57	\$ 2,575,228	
	<u>Labor Costs</u>	<u>Headcount</u>	<u>Salary</u>	<u>Severance Costs</u>
5	<i>Met-Ed</i>	44	\$ 1,993,656	\$ -
6	<i>Penelec</i>	46	\$ 2,094,519	\$ -
7	<i>Penn Power</i>	13	\$ 581,572	\$ -
8	<i>West Penn Power</i>	57	\$ 2,575,228	\$ -
	<u>Staffing Updates</u>	<u>Additions</u>	<u>Reductions</u>	
9	<i>Met-Ed</i>	-	-	
10	<i>Penelec</i>	-	-	
11	<i>Penn Power</i>	-	-	
12	<i>West Penn Power</i>	-	-	

Contact Center Cost Baseline for Smart Meter Benefit by FERC Accounts For the Twelve Months Ending December 2017

<u>Line No.</u>	<u>FERC Account</u>	<u>Description</u>	<u>Amount</u>
Salary			
<i>Met-Ed</i>			
1	FERC Account 903	Cust Rcrd & Collect Exp	\$ -
2	FERC Account 910	Misc Cust Svc & Info Exp	1,576,012
3	FERC Account 408.1	Taxes Other than Income Taxes	118,375
4	FERC Account 926	A&G-Employee Pensions & Benefits	299,268
5		Total	<u>\$ 1,993,656</u>
<i>Penelec</i>			
6	FERC Account 903	Cust Rcrd & Collect Exp	\$ -
7	FERC Account 910	Misc Cust Svc & Info Exp	1,655,746
8	FERC Account 408.1	Taxes Other than Income Taxes	124,364
9	FERC Account 926	A&G-Employee Pensions & Benefits	314,409
10		Total	<u>\$ 2,094,519</u>
<i>Penn Power</i>			
11	FERC Account 903	Cust Rcrd & Collect Exp	\$ -
12	FERC Account 910	Misc Cust Svc & Info Exp	459,741
13	FERC Account 408.1	Taxes Other than Income Taxes	34,531
14	FERC Account 926	A&G-Employee Pensions & Benefits	87,300
15		Total	<u>\$ 581,572</u>
<i>West Penn Power</i>			
16	FERC Account 902	Meter Reading Expense	\$ -
17	FERC Account 903	Cust Rcrd & Collect Exp	-
18	FERC Account 910	Misc Cust Svc & Info Exp	2,035,753
19	FERC Account 408.1	Taxes Other than Income Taxes	152,907
20	FERC Account 926	A&G-Employee Pensions & Benefits	386,568
21		Total	<u>\$ 2,575,228</u>

**Revenue Enhancement and Avoided Capital Costs
Cost Baseline for Smart Meter Benefit
For the Twelve Months Ending December 2017**

Revenue Enhancement -- Change 1.5 day lag in Cash Working Capital

<u>Line No.</u>		<u>Penn Power</u>
1	1.5 day lag for billing difference in CWC	\$ 867,000
2	Associated Rev Req	\$ 130,000

Avoided Capital Costs -- Material and Supply Inventories at December 2017

	<u>Penn Power</u>
3 Legacy meters in inventory	\$ -
4 Handheld devices in inventory	<u>-</u>
5 Total inventory (Line 3 + Line 4)	\$ -
6 Revenue requirement	\$ -

**Load Research
 Cost Baseline for Smart Meter Benefit
 For the Twelve Months Ending December 2017**

<u>Line No</u>	<u>Description</u>	<u>Penn Power</u>
1	Number of load research meters in field	14
2	Cost of load research meters	\$ 400
3	Cost of Normal meters	<u>50</u>
4	Net Cost of load research Meters (Line 2 - Line 3)	\$ 350
5	Capital Cost of load research Meters (line 1 X line 4)	\$ 4,900
6	Depreciation Reserve per meter	226
7	Accumulated Depreciation Reserve (Line 1 X Line 6)	<u>3,161</u>
8	Net load research Meters in Rate Base (Line 5 - Line 7)	\$ 1,740
9	Carrying Charge	<u>13.16%</u>
10	Revenue requirement for rate base (Line 8 X Line 9)	\$ 229
11	Depreciation Rate of meters	2.70%
12	Depreciation expense (Line 5 X Line 11)	<u>132</u>
13	Revenue requirement (Line 10 + Line 12)	<u>\$ 361</u>

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**PENNSYLVANIA POWER COMPANY
DOCKET NO. R-2016-2537355**

**Direct Testimony
of
John J. Spanos**

List of Topics Addressed

**Annual and Accrued Depreciation
Service Lives**

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**DIRECT TESTIMONY
OF
JOHN J. SPANOS**

4 **I. INTRODUCTION AND BACKGROUND**

5 **Q. Please state your name and address.**

6 A. John J. Spanos. My business address is 207 Senate Avenue, Camp Hill, Pennsylvania.

7 **Q. With what firm are you associated and in what capacity?**

8 A. I am associated with the firm of Gannett Fleming Valuation and Rate Consultants, LLC
9 as Senior Vice President.

10 **Q. How long have you been associated with Gannett Fleming?**

11 A. I have been associated with the firm since college graduation in June 1986.

12 **Q. What is your educational background?**

13 A. I have Bachelor of Science degrees in Industrial Management and Mathematics from
14 Carnegie-Mellon University and a Master of Business Administration from York College
15 of Pennsylvania.

16 **Q. Are you a member of any professional societies?**

17 A. Yes. I am a member and past President of the Society of Depreciation Professionals. I
18 am also a member of the American Gas Association/Edison Electric Institute Industry
19 Accounting Committee.

1 **Q. Have you taken the certification examination for depreciation professionals?**

2 A. Yes, I passed the certification examination of the Society of Depreciation Professionals in
3 September 1997 and was recertified in August 2003, February 2008 and January 2013.

4 **Q. Will you outline your experience in the field of depreciation?**

5 A. I have thirty years of depreciation experience which includes expert testimony in over
6 200 cases before approximately forty regulatory commissions, including the
7 Pennsylvania Public Utility Commission (“Commission”).

8 **Q. Please outline your experience in the field of depreciation.**

9 A. In June 1986, I was employed by Gannett Fleming Valuation and Rate Consultants, Inc.
10 as a Depreciation Analyst. During the period from June 1986 through December 1995, I
11 helped prepare numerous depreciation and original cost studies for utility companies in
12 various industries.

13 I helped perform depreciation studies for the following telephone companies: United
14 Telephone of Pennsylvania, United Telephone of New Jersey, and Anchorage Telephone
15 Utility.

16 I helped perform depreciation studies for the following companies in the railroad
17 industry: Union Pacific Railroad, Burlington Northern Railroad, and Wisconsin Central
18 Transportation Corporation.

1 I helped perform depreciation studies for the following organizations in the electric utility
2 industry: Chugach Electric Association, The Cincinnati Gas and Electric Company
3 (CG&E), The Union Light, Heat and Power Company (ULH&P), Northwest Territories
4 Power Corporation, and the City of Calgary - Electric System.

5 I helped perform depreciation studies for the following pipeline companies: TransCanada
6 Pipelines Limited, Trans Mountain Pipe Line Company Ltd., Interprovincial Pipe Line
7 Inc., Nova Gas Transmission Limited and Lakehead Pipeline Company.

8 I helped perform depreciation studies for the following gas utility companies: Columbia
9 Gas of Pennsylvania, Columbia Gas of Maryland, The Peoples Natural Gas Company, T.
10 W. Phillips Gas & Oil Company, CG&E, ULH&P, Lawrenceburg Gas Company and
11 Penn Fuel Gas, Inc.

12 I helped perform depreciation studies for the following water utility companies: Indiana-
13 American Water Company, Consumers Pennsylvania Water Company and The York
14 Water Company; and depreciation and original cost studies for Philadelphia Suburban
15 Water Company and Pennsylvania-American Water Company.

16 In each of the above studies, I assembled and analyzed historical and simulated data,
17 performed field reviews, developed preliminary estimates of service life and net salvage,
18 calculated annual depreciation, and prepared reports for submission to state public utility
19 commissions or federal regulatory agencies. I performed these studies under the general
20 direction of William M. Stout, P.E.

1 In January 1996, I was assigned to the position of Supervisor of Depreciation Studies. In
2 July 1999, I was promoted to the position of Manager, Depreciation and Valuation
3 Studies. In December 2000, I was promoted to the position of Vice-President of Gannett
4 Fleming Valuation and Rate Consultants, Inc., and in April 2012, I was promoted to my
5 present position as Senior Vice President of the Valuation and Rate Division of Gannett
6 Fleming Inc. (now doing business as Gannett Fleming Valuation and Rate Consultants,
7 LLC). In my current position I am responsible for conducting all depreciation, valuation
8 and original cost studies, including the preparation of final exhibits and responses to data
9 requests for submission to the appropriate regulatory bodies.

10 Since January 1996, I have conducted depreciation studies similar to those previously
11 listed including assignments for those utilities listed in Appendix A to this testimony.
12 My additional duties include determining final life and salvage estimates, conducting
13 field reviews, presenting recommended depreciation rates to management for its
14 consideration and supporting such rates before regulatory bodies.

15 **Q. Have you submitted testimony to any state utility commission on the subject of**
16 **utility plant depreciation?**

17 A. Yes. I have submitted testimony to those utility commissions listed in Appendix B to this
18 testimony.

19 **Q. Have you had any additional education relating to utility plant depreciation?**

1 A. Yes. I have completed the following courses conducted by Depreciation Programs, Inc.:
2 “Techniques of Life Analysis,” “Techniques of Salvage and Depreciation Analysis,”
3 “Forecasting Life and Salvage,” “Modeling and Life Analysis Using Simulation,” and
4 “Managing a Depreciation Study.” I have also completed the “Introduction to Public
5 Utility Accounting” program conducted by the American Gas Association.

6 **Q. What is the purpose of your testimony?**

7 A. My testimony supports the depreciation studies conducted under my direction and
8 supervision for the electric plant of Pennsylvania Power Company (“Penn Power” or the
9 “Company”).

10 **Q. Have you prepared exhibits presenting the results of your studies that you are**
11 **sponsoring as part of this testimony?**

12 A. Yes. Penn Power Exhibit JJS-1 presents the results of the depreciation study as of
13 December 31, 2015 for the Company. Penn Power Exhibit JJS-2 presents the results of
14 the depreciation study as of December 31, 2016. Penn Power Exhibit JJS-3 presents the
15 results of the depreciation study as of December 31, 2017. Penn Power Exhibits JJS-4
16 and JJS-5 provide the backup calculations to support my studies as presented in Penn
17 Power Exhibits JJS-1 through JJS-3. In addition, I am responsible for Penn Power
18 Exhibits JJS-6 through JJS-14, which are responses to the following filing requirements
19 pertaining to depreciation under Section 53.53(a)(1) of the Commission’s regulations: V-
20 A-3, V-B-1, V-B-2, V-C-1, V-D-1, V-D-2, V-E-1, VI-C and VI-D.

1 **II. DETERMINATION OF ACCRUAL AND ACCRUED DEPRECIATION**

2 **Q. Please describe Penn Power Exhibits JJS-1, JJS-2 and JJS-3.**

3 A. Penn Power Exhibit JJS-1, titled “2015 Depreciation Study - Calculated Annual
4 Depreciation Accruals Related to Electric Plant as of December 31, 2015,” includes the
5 results of the depreciation study related to the original cost of electric plant in service at
6 December 31, 2015. The report also includes the detailed depreciation calculations.
7 Penn Power Exhibit JJS-2, titled “2016 Depreciation Study - Calculated Annual
8 Depreciation Accruals Related to Electric Plant as of December 31, 2016,” includes the
9 results of the depreciation study related to the estimated original cost of electric plant in
10 service at December 31, 2016. The report also includes explanatory text, statistics related
11 to the estimation of service life, and the detailed depreciation calculations. Penn Power
12 Exhibit JJS-3 titled “2017 Depreciation Study – Calculated Annual Depreciation
13 Accruals Related to Electric Plant as of December 31, 2017,” includes the results of the
14 depreciation study related to the estimated original cost of electric plant in service at
15 December 31, 2017.

16 **Q. What are the purposes of your depreciation studies?**

17 A. The purposes of the depreciation studies are to estimate the annual depreciation accruals
18 related to electric plant in service for ratemaking purposes and, using Commission-
19 approved procedures, to estimate the Company’s book reserve at December 31, 2016, and
20 December 31, 2017.

1 **Q. Is the Company's claim for annual depreciation in the current proceeding based on**
2 **the same methods of depreciation that were used in its most recent Annual**
3 **Depreciation Report and service life study filed in August 2015?**

4 A. Yes, it is. For most plant accounts, the current claim for annual depreciation is based on
5 the straight line remaining life method of depreciation, which has been used by the
6 Company for over fifteen years. For Accounts 391.1, 391.2, 391.25, 393, 394, 395, 397
7 and 398, the claim is based on the straight line remaining life method of amortization.
8 Those accounts have a large number of units, but small asset values, representing less
9 than two percent of the Company's depreciable plant. The assets represent items located
10 in office buildings, service centers, garages and warehouses. Given the difficulty in
11 maintaining accounting records for these numerous assets and high cost for periodic
12 inventories, retirements are recorded when a vintage is fully amortized, rather than as the
13 units are removed from service. All units are retired when the age of the vintage reaches
14 the amortization period. The annual amortization is based on amortization accounting,
15 which distributes the unrecovered cost of fixed capital assets over the remaining
16 amortization period selected for each account.

17 **Q. What group procedure is being used in this proceeding for depreciable accounts?**

18 A. The equal life group procedure is used in the current proceeding for all vintages.

19 **Q. Is the Company's claim for accrued depreciation in the current proceeding made on**
20 **the same basis as has been used for over fifteen years?**

1 A. Yes. The current claim for accrued depreciation is the book reserve brought forward
2 from the book reserve that was accepted in the last proceeding.

3 **Q. How was the book reserve used in the calculation of annual depreciation?**

4 A. The book reserve by account was allocated to vintages to determine original cost less
5 accrued depreciation by vintage. The total annual accrual is the sum of the results of
6 dividing the original costs less accrued depreciation by the vintage composite remaining
7 lives.

8 **Q. How was the book reserve at December 31, 2016 estimated?**

9 A. The book reserve at December 31, 2016, by account, was projected by adding estimated
10 accruals, salvage and the amortization of net salvage, and subtracting estimated
11 retirements and cost of removal from the book reserve at December 31, 2015. Annual
12 accruals were estimated using the annual accruals calculated as of December 31, 2015.
13 For most accounts, salvage and cost of removal were estimated by: (1) expressing actual
14 salvage and cost of removal as a percent of retirements by account, for the most recent
15 five-year period; and (2) applying those percentages to the projected retirements by
16 account. For the purpose of calculating the annual accruals, the projected book reserve
17 by account was allocated to vintages based on calculated accrued depreciation at
18 December 31, 2016.

19 **Q. Was the book reserve at December 31, 2017, estimated using the same methodology?**

20 A. Yes, it was.

1 **III. DETERMINATION OF SERVICE LIVES**

2 **Q. Has a service life study of the Company’s electric utility property been performed?**

3 A. Yes. The most recent service life study was performed as of December 2014. The
4 service life study is the basis for the service lives I used to calculate annual accruals.

5 **Q. Briefly outline the procedure used in performing the service life study.**

6 A. The service life study consisted of assembling and compiling historical data from the
7 records related to the electric utility plant of the Company; statistically analyzing such
8 data to obtain historical trends of survivor characteristics; obtaining supplementary
9 information from management and operating personnel concerning Company practices
10 and plans as they relate to plant operations; and interpreting the above data to form
11 judgments of service life characteristics.

12 Iowa type survivor curves (“Iowa Curves”) were used to describe the estimated survivor
13 characteristics of the mass property groups. Individual service lives were used for major
14 individual units of plant, such as distribution buildings housing offices and shops. The
15 life span concept was recognized by coordinating the lives of associated plant installed in
16 subsequent years with the probable retirement date defined by the life estimated for the
17 major unit.

18 **Q. What statistical data were employed in the historical analyses performed for the**
19 **purpose of estimating service life characteristics?**

1 A. The data consisted of the entries made to record retirements and other transactions related
2 to the electric plant generally during the period 1943-2014. The year 1943 is the first
3 year continuing property records were maintained for the Company. These entries were
4 classified by depreciable group, type of transaction, the year in which the transaction took
5 place, and the year in which the plant was installed. Types of transactions included in the
6 data were plant additions, retirements, transfers, and balances. In the presentation of
7 service life statistics, only the significant exposure points that were utilized in
8 determining survivor curves were plotted. This process is utilized to show how
9 reasonable judgments were made, based on the available data set, to arrive at the service
10 life determinations.

11 **Q. What was the source of these data?**

12 A. They were assembled from Company records related to its electric plant in service.

13 **Q. Were the methods used in the service life study the same as those used in other
14 depreciation studies for electric utility plant presented before this Commission?**

15 A. Yes. The methods are the same ones that have been presented previously for each of the
16 Pennsylvania electric utility subsidiaries of FirstEnergy Corp. before the Commission and
17 that have been accepted by the Commission in its prior base rate proceedings for those
18 electric utilities.

19 **Q. What approach did you use to estimate the lives of significant structures such as
20 office buildings and service centers?**

1 A. I used the life span technique to estimate the lives of significant structures. In this
2 technique, the survivor characteristics of the structures are described by the use of interim
3 survivor curves and estimated probable retirement dates. The interim survivor curve
4 describes the rate of retirement related to the replacement of elements of the structure
5 such as plumbing, heating, doors, windows, roofs, etc. that occur during the life of the
6 facility. The probable retirement date provides the rate of final retirement for each year
7 of installation for the structure by truncating the interim survivor curve for each
8 installation year at its attained age at the date of probable retirement. The use of interim
9 survivor curves truncated at the date of probable retirement provides a consistent method
10 for estimating the lives of the several years of installation inasmuch as concurrent
11 retirement of all years of installation will occur when the structure is retired.

12 **Q. Has your firm used this approach in other proceedings before this Commission?**

13 A. Yes, we have used the life span technique on many occasions before the Commission.

14 **Q. What are the bases for the probable retirement years that you have estimated for**
15 **each structure?**

16 A. The bases for the estimates of probable retirement years are life spans for each structure
17 that are based on judgment and incorporate consideration of the age, use, size, nature of
18 construction, management outlook and typical life spans experienced and used by other
19 electric utilities for similar structures. Most of the life spans result in probable retirement
20 dates that are many years in the future. As a result, the retirement of these structures is

1 not yet subject to specific management plans. Such plans would be premature. At the
2 appropriate time, studies of the economics of rehabilitation and continued use or
3 retirement of the structure will be analyzed and the results incorporated in the estimation
4 of the structure's life span.

5 **Q. Are the factors considered in your estimates of service life presented in Exhibit JJS-**
6 **2?**

7 A. Yes. A discussion of the factors considered in the estimation of service lives is presented
8 by account on pages III-2 through III-4 of Penn Power Exhibit JJS-2.

9 **Q. Were there any material changes to life characteristics as a result of your study?**

10 A. No. There were no material changes in the life estimates for plant accounts or
11 subaccounts. All life estimates were based on the recent annual depreciation reports
12 issued when the service life studies were conducted.

1 **IV. DESCRIPTION OF THE CONTENTS OF PENN POWER EXHIBITS JJS-1, JJS-2**
2 **AND JJS-3**

3 **Q. Please outline the contents of Penn Power Exhibit JJS-2.**

4 A. Penn Power Exhibit JJS-2 is presented in eight parts. Part I, Introduction, sets forth the
5 scope and basis of the study. Part II, Estimation of Survivor Curves, includes a
6 description of the Iowa Curves and the formulation of the retirement rate method. Part
7 III, Service Life Considerations, and Part IV, Calculation of Annual and Accrued
8 Depreciation, include a description of the how service life parameters were determined
9 and an explanation of depreciation procedures.

10 Part V, Results of Study, presents a description of the results and summaries of the
11 depreciation calculations. Part VI, Service Life Statistics, presents the graphs and tables
12 which relate to the service life study. Part VII, Detailed Depreciation Calculations, sets
13 forth the detailed depreciation calculations by account. Part VIII, Experienced and
14 Estimated Net Salvage, presents the cost of removal and gross salvage by account for the
15 years 2012 through 2016.

16 Table 1, pages V-4 and V-5, presents the estimated survivor curve, the original cost at
17 December 31, 2016, and the book reserve and calculated annual depreciation for each
18 account or subaccount of Electric Plant. Table 2, pages V-6 and V-7, presents the
19 bringforward to December 31, 2016, of the book depreciation reserve as of December 31,
20 2015. Table 3 on page V-8 sets forth the calculation of the annual accruals used in the

1 bringforward. Table 4, page V-9, presents the experienced and estimated net salvage
2 during the five-year period, 2012 through 2016.

3 The section beginning on page VI-2 presents the results of the retirement rate analyses
4 prepared as the historical bases for the service life estimates. The section beginning on
5 page VII-2 presents the depreciation calculations related to original cost. The tabulation
6 on pages VII-3 through VII-5 presents the cumulative depreciated original cost by year
7 installed. The tabulations on pages VII-7 through VII-63 present the calculation of
8 annual depreciation by vintage by account for each depreciable group of utility plant.
9 Each of the other three companies has exhibits prepared in the same fashion.

10 **Q. Please outline the contents of Penn Power Exhibit No. JJS-3.**

11 A. Penn Power Exhibit JJS-3 includes a description of the results, summaries of the
12 depreciation calculations, and the detailed depreciation calculations as of December 31,
13 2017. The descriptions and explanations presented in Penn Power Exhibit JJS-2 are also
14 applicable to the depreciation calculations presented in Penn Power Exhibit JJS-3. The
15 graphs and tables related to service life presented in Penn Power Exhibit JJS-2 also
16 support the service life estimates used in Penn Power Exhibit JJS-3 inasmuch as the
17 estimates are the same for both test years. The summary tables and detailed depreciation
18 calculations as of December 31, 2017, are organized and presented in the same manner as
19 those as of December 31, 2016.

20 **Q. Please outline the contents of Penn Power Exhibit JJS-1.**

1 A. Penn Power Exhibit JJS-1 includes a description of the results, summaries of the
2 depreciation calculations, and the detailed depreciation calculations as of December 31,
3 2015. The descriptions and explanations presented in Penn Power Exhibit JJS-2 are also
4 applicable to the depreciation calculations presented in Exhibit No. JJS-1. The graphs
5 and tables related to service life presented in Penn Power Exhibit JJS-2 also support the
6 service life estimates used in Penn Power Exhibit JJS-1, inasmuch as the estimates are the
7 same for both test years. The summary tables and detailed depreciation calculations as of
8 December 31, 2015 are organized and presented in the same manner as those as of
9 December 31, 2016.

10 **Q. Please use an example to illustrate the manner in which the study is presented in**
11 **Penn Power Exhibits JJS-1, JJS-2 and JJS-3.**

12 A. I will use Penn Power Account 365, Overhead Conductors and Devices, as my example,
13 inasmuch as it is the largest depreciable group and represents eighteen percent of the
14 original cost of depreciable electric plant as of December 31, 2016.

15 The retirement rate method was used to analyze the survivor characteristics of this group.
16 The life tables for the 1943-2014 and 1975-2014 experience bands are presented on pages
17 VI-48 through VI-50 of Penn Power Exhibit JJS-2. The life tables, or original survivor
18 curve, are plotted along with the estimated smooth survivor curve, the 60-R1, on page
19 VI-47.

1 The calculations of the annual depreciation related to the original cost at December 31,
2 2015, of electric plant are presented on pages II-33 through II-35 of Exhibit JJS-1. The
3 calculation is based on the 60-R1 survivor curve, the attained age, and the allocated book
4 reserve. The calculations at December 31, 2016 are presented on pages VII-33 through
5 VII-35 of Penn Power Exhibit JJS-2 and are based in part on the bringforward of the
6 book reserve. Also, the calculations at December 31, 2017 are presented on pages II-33
7 through II-35 of Penn Power Exhibit JJS-3 and are based in part on the bringforward of
8 the book reserve. The tabulations in Penn Power Exhibit JJS-1, JJS-2 and JJS-3 set forth
9 the installation year, the original cost, calculated accrued depreciation, allocated book
10 reserve, future accruals, remaining life and annual accrual. The totals are brought
11 forward to Table 1 on page I-3 in Penn Power Exhibit JJS-1, page V-4 in Penn Power
12 Exhibit JJS-2, and on page I-3 in Penn Power Exhibit JJS-3.

13 **Q. In what manner is net salvage incorporated in the depreciation calculations?**

14 A. As stated on page IV-9 of Penn Power Exhibit JJS-2, no adjustment for net salvage was
15 made to the calculated annual depreciation amounts. The total calculated annual
16 depreciation set forth on page I-4 of Penn Power Exhibit JJS-1, page V-5 of Penn Power
17 Exhibit JJS-2 and on page I-4 of Penn Power Exhibit JJS-3 should include an addition for
18 the amortization of negative net salvage in accordance with the practice of this
19 Commission. The amortization is based on experience during the period 2011 through
20 2015 for the calculation as of December 31, 2015 and on experience during the period

1 2012 through December 31, 2015, plus estimates for the twelve months of 2016 for the
2 calculation as of December 31, 2016.

3 The amortization for the December 31, 2017 calculation is based on experience during
4 the period 2013 through December 31, 2015, plus estimates for the period January 2016
5 through December 2017. The amounts of the five-year amortizations are calculated in
6 Table 2 on page I-5 of Penn Power Exhibit JJS-1, in Table 4 on page V-9 of Penn Power
7 Exhibit JJS-2, and in Table 4 on page I-8 of Penn Power Exhibit JJS-3.

8 **Q. Have you provided a monthly bringforward to December 31, 2017 of the book**
9 **depreciation reserve as of December 31, 2016?**

10 A. Yes. Schedule JJS-01, which is appended to this statement, provides the monthly detail
11 of the book depreciation reserve and the calculated depreciation. This schedule agrees
12 with the fully projected future test year reserve balance shown on Penn Power Exhibit
13 JJS-3, Table 1, on pages I-3 and I-4.

14 **V. CONCLUSION**

15 **Q. Does this complete your direct testimony at this time?**

16 A. Yes, it does.

17

APPENDIX A

Pennsylvania-American Water Company
Aqua Pennsylvania
Kentucky-American Water Company
Virginia-American Water Company
Indiana-American Water Company
Hampton Water Works Company
Omaha Public Power District
Enbridge Pipe Line Company, Inc.
Columbia Gas of Virginia, Inc.
Virginia Natural Gas Company
National Fuel Gas Distribution Corporation - New York and Pennsylvania Divisions
The City of Bethlehem - Bureau of Water
The City of Coatesville Authority
The City of Lancaster - Bureau of Water
Peoples Energy Corporation
The York Water Company
Public Service Company of Colorado
Enbridge Pipelines
Enbridge Gas Distribution, Inc.
Reliant Energy-HLP
Massachusetts-American Water Company
St. Louis County Water Company
Missouri-American Water Company
Chugach Electric Association
Alliant Energy
Oklahoma Gas & Electric Company
Nevada Power Company
Dominion Virginia Power
NUI-Virginia Gas Companies
Pacific Gas & Electric Company
PSI Energy
NUI - Elizabethtown Gas Company
Cinergy Corporation – CG&E
Cinergy Corporation – ULH&P
Columbia Gas of Kentucky
South Carolina Electric & Gas Company
Idaho Power Company
El Paso Electric Company
Aqua North Carolina
Aqua Ohio

Aqua Texas, Inc.
Ameren Missouri
Central Hudson Gas & Electric
Centennial Pipeline Company
CenterPoint Energy-Arkansas
CenterPoint Energy – Oklahoma
CenterPoint Energy – Entex
CenterPoint Energy - Louisiana
NSTAR – Boston Edison Company
Westar Energy, Inc.
United Water Pennsylvania
PPL Electric Utilities
PPL Gas Utilities
Wisconsin Power & Light Company
TransAlaska Pipeline
Avista Corporation
Northwest Natural Gas
Allegheny Energy Supply, Inc.
Public Service Company of North Carolina
South Jersey Gas Company
Duquesne Light Company
MidAmerican Energy Company
Laclede Gas
Duke Energy Company
E.ON U.S. Services Inc.
Elkton Gas Services
Anchorage Water and Wastewater Utility
Kansas City Power and Light
Duke Energy North Carolina
Duke Energy South Carolina
Monongahela Power Company
Potomac Edison Company
Duke Energy Ohio Gas
Duke Energy Kentucky
Duke Energy Indiana
Northern Indiana Public Service Company
Tennessee-American Water Company
Columbia Gas of Maryland
Bonneville Power Administration
NSTAR Electric and Gas Company
EPCOR Distribution, Inc.
B. C. Gas Utility, Ltd

Entergy Arkansas
Entergy Texas
Entergy Mississippi
Entergy Louisiana
Entergy Gulf States Louisiana
The Borough of Hanover
Louisville Gas and Electric Company
Kentucky Utilities Company
Madison Gas and Electric
Central Maine Power
PEPCO
PacifiCorp
Minnesota Energy Resource Group
Jersey Central Power & Light Company
Cheyenne Light, Fuel and Power Company
United Water Arkansas
Central Vermont Public Service Corporation
Green Mountain Power
Portland General Electric Company
Atlantic City Electric
Nicor Gas Company
Black Hills Power
Black Hills Colorado Gas
Black Hills Kansas Gas
Black Hills Service Company
Black Hills Utility Holdings
Public Service Company of Oklahoma
City of Dubois
Peoples Gas Light and Coke Company
North Shore Gas Company
Connecticut Light and Power
New York State Electric and Gas Corporation
Rochester Gas and Electric Corporation
Greater Missouri Operations

APPENDIX B

Pennsylvania Public Utility Commission
Commonwealth of Kentucky Public Service Commission
Public Utilities Commission of Ohio
Nevada Public Utility Commission
Public Utilities Board of New Jersey
Missouri Public Service Commission
Massachusetts Department of Telecommunications and Energy
Alberta Energy & Utility Board
Idaho Public Utility Commission
Louisiana Public Service Commission
State Corporation Commission of Kansas
Oklahoma Corporate Commission
Public Service Commission of South Carolina
Railroad Commission of Texas – Gas Services Division
New York Public Service Commission
Illinois Commerce Commission
Indiana Utility Regulatory Commission
California Public Utilities Commission
Federal Energy Regulatory Commission (“FERC”)
Arkansas Public Service Commission
Public Utility Commission of Texas
Maryland Public Service Commission
Washington Utilities and Transportation Commission
Tennessee Regulatory Commission
Regulatory Commission of Alaska
Minnesota Public Utility Commission
Utah Public Service Commission
District of Columbia Public Service Commission
Mississippi Public Service Commission
Delaware Public Service Commission
Virginia State Corporation Commission
Colorado Public Utility Commission
Oregon Public Utility Commission
South Dakota Public Utilities Commission
Wisconsin Public Service Commission
Wyoming Public Service Commission
Maine Public Utility Commission
Iowa Utility Board
Connecticut Public Utilities Regulatory Authority
New Mexico Public Regulation Commission
North Carolina Utilities Commission

SCHEDULE JJS-01

MONTHLY RESERVE BRINGFORWARD FOR FTTY 2017

Account	2016		FTY Rates 2016	COR % of Rets	Salvage % of Rets	'5-yr Amort of NS 2012-2016	2017							
	DECEMBER 31						JANUARY							
	Begin. Balance						Avg. Accruals	Amort. of NS	Accruals	Retirements	Cost of Removal	Salvage	Acquisitions	Ending Balance
303.00	9,647,740		5.20				52,641	0	52,641	0	0	0	0	9,700,381
303.10	698,001		14.69				51,077	0	51,077	0	0	0	0	749,078
352.10	528,270		0.80		310		510	26	536	0	0	0	0	528,806
352.20	105,041		1.35				220	0	220	0	0	0	0	105,261
353.00	4,669,714		0.82		9,881		4,385	823	5,209	0	0	0	0	4,694,923
354.00	7,529		0.07				0	0	0	0	0	0	0	7,529
355.00	892,544		1.86		21,628		4,380	1,802	6,182	0	0	0	0	898,726
356.00	958,466		1.61		5,356		3,652	446	4,098	0	0	0	0	962,564
357.00	54,742		1.56				84	0	84	0	0	0	0	54,826
358.00	29,751		1.71				51	0	51	0	0	0	0	29,802
359.00	5,119		1.22				6	0	6	0	0	0	0	5,125
361.10	554,152		1.28				1,386	0	1,386	427	0	0	0	555,111
361.20	202,121		1.38				516	0	516	0	0	0	0	202,637
362.00	14,463,798		2.70	0.51		157,368	118,570	13,114	131,684	41,800	21,318	0	0	14,532,365
364.00	32,854,720		2.17	2.50		953,279	201,120	79,440	280,560	87,494	218,736	875	0	32,829,925
365.00	24,137,780		2.35	0.83		882,112	228,632	73,509	302,141	119,955	99,563	0	0	24,220,403
365.10	6,001,167		2.44				98,803	0	98,803	0	0	0	0	6,099,970
366.00	2,398,624		1.87	0.35		764	11,918	64	11,982	496	174	0	0	2,409,936
367.00	20,835,527		2.20	1.13		236,809	121,768	19,734	141,502	44,230	49,980	0	0	20,882,820
368.00	34,173,620		2.69	0.22		280,640	242,284	23,387	265,651	45,072	9,916	0	0	34,384,283
369.00	19,527,568		1.33	2.00		132,800	43,043	11,067	54,110	6,028	12,056	0	0	19,563,593
370.10	4,172,215		9.04			701	273,315	58	273,373	0	0	0	0	4,445,588
371.00	2,537,778		2.14			8,578	6,764	715	7,479	0	0	0	0	2,545,257
373.10	4,354,501		3.07	0.46		49,189	19,682	4,099	23,781	606	279	0	0	4,377,398
373.20			2.72			7,424	57	619	675	0	0	0	0	12,951
390.10	2,924,083		1.84	0.10		3,948	9,433	329	9,762	3	0	0	0	2,933,842
390.20	8,662		2.25				77	0	77	0	0	0	0	8,759
391.10	303,892		15.57				5,214	0	5,214	0	0	0	0	309,106
391.25	872,137		9.54			5,578	9,470	465	9,934	0	0	0	0	882,071
392.00	219,487		11.38			(1,062)	51,273	0	51,273	0	0	0	0	1,024,983
393.00	69,790		8.80				5,641	(89)	5,553	0	0	0	0	225,040
394.00	518,553		9.24				919	0	919	0	0	0	0	70,709
395.00	12,587		4.99				15,191	0	15,191	0	0	0	0	533,744
396.00	216,813		5.87				124	0	124	0	0	0	0	12,711
397.00	166,789		9.92				2,255	0	2,255	0	0	0	0	219,068
398.00	25,331		1.72				175	0	175	0	0	0	0	184,449
398.10			0.00				0	0	0	0	0	0	0	25,506
398.20			0.00				0	0	0	0	0	0	0	0
399.10	21,479		0.00				0	0	0	0	0	0	0	21,479
Total	190,179,221					2,755,303	1,602,278	229,609	1,831,887	346,110	412,021	875	0	191,253,851

MONTHLY RESERVE BRINGFORWARD FOR FTTY 2017

Account	2016		FTY Rates 2016	COR % of Rets	Salvage % of Rets	'5-yr Amort of NS 2012-2016	2017							
	DECEMBER 31						FEBRUARY							
	Begin Balance						Avg. Accruals	Amort. of NS	Accruals	Retirements	Cost of Removal	Salvage	Acquisitions	Ending Balance
303.00	9,647,740		5.20				52,887	0	52,887	0	0	0	0	9,753,268
303.10	698,001		14.69				53,112	0	53,112	0	0	0	0	802,190
352.10	528,270		0.80			310	510	26	536	0	0	0	0	529,341
352.20	105,041		1.35				220	0	220	0	0	0	0	105,480
353.00	4,689,714		0.82			9,881	4,385	823	5,209	0	0	0	0	4,700,132
354.00	7,529		0.07				0	0	0	0	0	0	0	7,530
355.00	892,544		1.86			21,628	4,380	1,802	6,182	0	0	0	0	904,908
356.00	958,466		1.61			5,356	3,652	446	4,098	0	0	0	0	966,663
357.00	54,742		1.56				84	0	84	0	0	0	0	54,910
358.00	29,751		1.71				51	0	51	0	0	0	0	29,854
359.00	5,119		1.22				6	0	6	0	0	0	0	5,132
361.10	554,152		1.28				1,390	0	1,390	427	0	0	0	556,074
361.20	202,121		1.38				516	0	516	0	0	0	0	203,153
362.00	14,463,798		2.70	0.51		157,368	119,417	13,114	132,531	41,800	21,318	0	0	14,601,778
364.00	32,854,720		2.17	2.50	0.01	953,279	202,544	79,440	281,984	87,494	218,736	875	0	32,806,553
365.00	24,137,780		2.35	0.83		882,112	230,746	73,509	304,255	119,955	99,563	0	0	24,305,141
365.10	6,001,167		2.44				98,803	0	98,803	0	0	0	0	6,198,772
366.00	2,398,624		1.87	0.35		764	11,925	64	11,989	496	174	0	0	2,421,254
367.00	20,835,527		2.20	1.13		236,809	122,498	19,734	142,232	44,230	49,980	0	0	20,930,843
368.00	34,173,620		2.69	0.22		280,640	243,174	23,387	266,560	45,072	9,916	0	0	34,595,856
369.00	19,527,568		1.33	2.00		132,800	43,103	11,067	54,170	6,028	12,056	0	0	19,589,678
370.10	4,172,215		9.04			701	274,902	58	274,960	0	0	0	0	4,720,548
371.00	2,537,778		2.14			8,578	6,764	715	7,479	0	0	0	0	2,552,735
373.10	4,354,501		3.07	0.46		49,189	19,696	4,099	23,795	606	279	0	0	4,400,309
373.20	12,276		2.72			7,424	57	619	675	0	0	0	0	13,627
390.10	2,924,083		1.84	0.10		3,948	9,433	329	9,762	3	0	0	0	2,943,602
390.20	8,692		2.25				77	0	77	0	0	0	0	8,837
391.10	303,892		15.57				5,214	0	5,214	0	0	0	0	314,319
391.20	872,137		9.54			5,578	9,470	465	9,934	0	0	0	0	892,006
391.25	973,710		19.37			(1,062)	51,548	0	51,548	0	0	0	0	1,076,531
392.00	219,487		11.38				5,641	(89)	5,553	0	0	0	0	230,593
393.00	69,790		8.80				919	0	919	0	0	0	0	71,628
394.00	518,553		9.24				15,191	0	15,191	0	0	0	0	548,935
395.00	12,587		4.99				124	0	124	0	0	0	0	12,836
396.00	216,813		5.87				2,255	0	2,255	0	0	0	0	221,323
397.00	166,789		9.92				17,755	0	17,755	0	0	0	0	202,204
398.00	25,331		1.72				175	0	175	0	0	0	0	25,682
301.00	0		0.00				0	0	0	0	0	0	0	0
302.00	772		0.00				0	0	0	0	0	0	0	772
350.10	0		0.00				0	0	0	0	0	0	0	0
350.20	0		0.00				0	0	0	0	0	0	0	0
360.10	0		0.00				0	0	0	0	0	0	0	0
360.20	0		0.00				0	0	0	0	0	0	0	0
374.00	2,352		0.00				0	0	0	0	0	0	0	2,352
389.10	0		0.00				0	0	0	0	0	0	0	0
389.20	0		0.00				0	0	0	0	0	0	0	0
399.10	21,479		0.00				0	0	0	0	0	0	0	21,479
Total	190,179,221					2,755,303	1,612,623	229,609	1,842,232	346,110	412,021	875	0	192,338,827

MONTHLY RESERVE BRINGFORWARD FOR FTYT 2017

Account	2016		FTY Rates	COR % of Rets	Salvage % of Rets	'5-yr Amort of NS 2012-2016	2017							
	DECEMBER 31						MARCH							
	Begin. Balance						Avg. Accruals	Amort. of NS	Accruals	Retirements	Cost of Removal	Salvage	Acquisitions	Ending Balance
303.00	9,647,740	5.20					53,132	0	53,132	0	0	0	0	9,806,401
303.10	698,001	14.69					55,146	0	55,146	0	0	0	0	857,336
352.10	528,270	0.80			310		510	26	536	0	0	0	0	529,877
352.20	105,041	1.35					220	0	220	0	0	0	0	105,700
353.00	4,689,714	0.82			9,881		4,385	823	5,209	0	0	0	0	4,705,341
354.00	7,529	0.07					0	0	0	0	0	0	0	7,530
355.00	892,544	1.86			21,628		4,380	1,802	6,182	0	0	0	0	911,090
356.00	958,466	1.61			5,356		3,652	446	4,098	0	0	0	0	970,761
357.00	54,742	1.56					84	0	84	0	0	0	0	54,994
358.00	29,751	1.71					51	0	51	0	0	0	0	29,905
359.00	5,119	1.22					6	0	6	0	0	0	0	5,138
361.20	554,152	1.28					1,394	0	1,394	427	0	0	0	557,041
362.00	14,463,798	2.70	0.51		157,368		516	0	516	0	0	0	0	203,669
364.00	32,854,720	2.17	2.50	0.01	953,279		120,263	13,114	133,377	41,800	21,318	0	0	14,672,037
365.00	24,137,780	2.35	0.83		882,112		203,968	79,440	283,408	87,494	218,736	875	0	32,784,606
365.10	6,001,167	2.44					232,860	73,509	306,369	119,955	99,563	0	0	24,391,992
366.00	2,398,624	1.87	0.35		764		98,803	0	98,803	0	0	0	0	6,297,575
367.00	20,835,527	2.20	1.13		236,809		11,932	64	11,996	496	174	0	0	2,432,580
368.00	34,173,620	2.69	0.22		280,640		123,228	19,734	142,962	44,230	49,980	0	0	20,979,595
369.00	19,527,568	1.33	2.00		132,800		244,083	23,387	267,470	45,072	9,916	0	0	34,808,338
370.10	4,172,215	9.04			701		43,163	11,067	54,230	6,028	12,056	0	0	19,635,824
371.00	2,537,778	2.14			8,578		276,489	58	276,548	0	0	0	0	4,997,096
373.10	4,354,501	3.07	0.46		49,189		19,710	4,099	23,809	606	279	0	0	2,560,214
373.20	12,276	2.72			7,424		57	619	675	0	0	0	0	4,423,234
390.10	2,924,083	1.84	0.10		3,948		9,434	329	9,763	3	0	0	0	2,953,361
390.20	8,682	2.25					77	0	77	0	0	0	0	8,914
391.10	303,892	15.57			5,578		5,214	0	5,214	0	0	0	0	319,533
391.20	872,137	9.54					9,470	465	9,934	0	0	0	0	901,940
391.25	973,710	19.37			(1,062)		51,822	0	51,822	0	0	0	0	1,128,353
392.00	219,487	11.38					5,641	(89)	5,553	0	0	0	0	236,146
393.00	69,790	8.80					919	0	919	0	0	0	0	72,547
394.00	518,553	9.24					15,191	0	15,191	0	0	0	0	564,126
395.00	12,587	4.99					124	0	124	0	0	0	0	12,960
396.00	216,813	5.87					2,255	0	2,255	0	0	0	0	223,579
397.00	166,789	9.92					17,849	0	17,849	0	0	0	0	220,053
398.00	25,331	1.72					175	0	175	0	0	0	0	25,857
301.00	0	0.00					0	0	0	0	0	0	0	0
302.00	772	0.00					0	0	0	0	0	0	0	772
350.10	0	0.00					0	0	0	0	0	0	0	0
350.20	0	0.00					0	0	0	0	0	0	0	0
360.10	0	0.00					0	0	0	0	0	0	0	0
360.20	0	0.00					0	0	0	0	0	0	0	0
374.00	2,352	0.00					0	0	0	0	0	0	0	2,352
389.10	0	0.00					0	0	0	0	0	0	0	0
389.20	0	0.00					0	0	0	0	0	0	0	0
398.10	21,479	0.00					0	0	0	0	0	0	0	21,479
Total	190,179,221				2,755,303		1,622,968	229,609	1,852,577	346,110	412,021	875	0	193,434,147

MONTHLY RESERVE BRINGFORWARD FOR FTTY 2017

Account	2016		FTY Rates 2016	COR % of Rets	Salvage % of Rets	's-yr Amort of NS 2012-2016	2017							Ending Balance
	DECEMBER 31 Begin. Balance	2016					APRIL							
							Avg. Accruals	Amort. of NS	Accruals	Retirements	Cost of Removal	Salvage	Acquisitions	
303.00	9,647,740	5.20					53,378	0	53,378	0	0	0	0	9,859,779
303.10	698,001	14.69					57,160	0	57,160	0	0	0	0	914,517
352.00	528,270	0.80				310	510	26	536	0	0	0	0	530,412
352.20	105,041	1.35					220	0	220	0	0	0	0	105,919
353.00	4,689,714	0.82				9,881	4,385	823	5,209	0	0	0	0	4,710,549
354.00	7,529	0.07					0	0	0	0	0	0	0	7,531
355.00	892,544	1.86				21,628	4,380	1,802	6,182	0	0	0	0	917,272
356.00	958,466	1.61				5,356	3,652	446	4,098	0	0	0	0	974,859
357.00	54,742	1.56					84	0	84	0	0	0	0	55,078
358.00	29,751	1.71					51	0	51	0	0	0	0	29,957
359.00	5,119	1.22					6	0	6	0	0	0	0	5,145
361.10	554,152	1.28					1,398	0	1,398	427	0	0	0	556,013
361.20	202,121	1.38					516	0	516	0	0	0	0	204,185
362.00	14,463,798	2.70	0.51			157,368	121,110	13,114	134,224	41,800	21,318	0	0	14,743,144
364.00	32,854,720	2.17	2.50	0.01		953,279	205,392	79,440	284,832	87,484	218,736	875	0	32,764,083
365.00	24,137,780	2.35	0.83			882,112	234,974	73,509	308,484	119,955	99,563	0	0	24,480,958
365.10	6,001,167	2.44					98,803	0	98,803	0	0	0	0	6,396,377
366.00	2,398,624	1.87	0.35			764	11,939	64	12,003	496	174	0	0	2,443,912
367.00	20,835,527	2.20	1.13			236,809	123,957	19,734	143,692	44,230	49,980	0	0	21,029,078
368.00	34,173,620	2.69	0.22			280,640	244,992	23,367	268,379	45,072	9,916	0	0	35,021,729
369.00	19,527,568	1.33	2.00			132,800	43,224	11,067	54,290	6,028	12,056	0	0	19,672,029
370.10	4,172,215	9.04				701	278,077	58	278,135	0	0	0	0	5,275,231
371.00	2,537,778	2.14				8,578	6,764	715	7,479	0	0	0	0	2,567,692
373.10	4,354,501	3.07	0.46			49,189	19,724	4,099	23,823	606	279	0	0	4,446,173
373.20	12,276	2.72				7,424	57	619	675	0	0	0	0	14,977
390.10	2,924,083	1.84	0.10			3,948	9,434	329	9,763	3	0	0	0	2,963,121
390.20	8,682	2.25					77	0	77	0	0	0	0	8,992
391.10	303,892	15.57					5,214	0	5,214	0	0	0	0	324,746
391.20	872,137	9.54				5,578	9,470	465	9,934	0	0	0	0	911,875
391.25	973,710	19.37				(1,062)	52,097	0	52,097	0	0	0	0	1,180,449
392.00	219,487	11.38					5,641	(89)	5,553	0	0	0	0	241,699
393.00	69,790	8.80					919	0	919	0	0	0	0	73,466
394.00	518,553	9.24					15,191	0	15,191	0	0	0	0	579,316
395.00	12,587	4.99					124	0	124	0	0	0	0	13,085
396.00	216,813	5.87					2,255	0	2,255	0	0	0	0	225,834
397.00	166,789	9.92					17,944	0	17,944	0	0	0	0	237,997
398.00	25,331	1.72					175	0	175	0	0	0	0	26,033
301.00	0	0.00					0	0	0	0	0	0	0	0
302.00	772	0.00					0	0	0	0	0	0	0	772
350.10	0	0.00					0	0	0	0	0	0	0	0
350.20	0	0.00					0	0	0	0	0	0	0	0
360.10	0	0.00					0	0	0	0	0	0	0	0
360.20	0	0.00					0	0	0	0	0	0	0	0
374.00	2,352	0.00					0	0	0	0	0	0	0	2,352
389.10	0	0.00					0	0	0	0	0	0	0	0
389.20	0	0.00					0	0	0	0	0	0	0	0
389.10	21,479	0.00					0	0	0	0	0	0	0	21,479
Total	190,179,221					2,755,303	1,633,313	229,609	1,862,922	346,110	412,021	875	0	194,539,813

MONTHLY RESERVE BRINGFORWARD FOR FTTY 2017

Account	2016		FTY Rates 2016	COR % of Rets	Salvage % of Rets	'5-yr Amort of NS 2012-2016	2017							
	DECEMBER 31						MAY							
	Begin. Balance						Avg. Accruals	Amort. of NS	Accruals	Retirements	Cost of Removal	Salvage	Acquisitions	Ending Balance
303.00	9,647,740	5.20					53,624	0	53,624	0	0	0	0	9,913,402
303.10	698,001	14.69					59,215	0	59,215	0	0	0	0	973,732
352.10	528,270	0.80			3.10		510	26	536	0	0	0	0	530,948
352.20	105,041	1.35					220	0	220	0	0	0	0	106,139
353.00	4,689,714	0.82			9.881		4,385	823	5,209	0	0	0	0	4,715,758
354.00	7,529	0.07					0	0	0	0	0	0	0	7,531
355.00	892,544	1.86			21,628		4,380	1,802	6,182	0	0	0	0	923,454
356.00	958,466	1.61			5,356		3,652	446	4,098	0	0	0	0	978,958
357.00	54,742	1.56					84	0	84	0	0	0	0	55,162
358.00	29,751	1.71					51	0	51	0	0	0	0	30,008
359.00	5,119	1.22					6	0	6	0	0	0	0	5,151
361.10	554,152	1.28					1,402	0	1,402	427	0	0	0	558,988
361.20	202,121	1.38					516	0	516	0	0	0	0	204,701
362.00	14,463,798	2.70	0.51		157,368		121,956	13,114	135,070	41,800	21,318	0	0	14,815,096
364.00	32,854,720	2.17	2.50	0.01	953,279		206,816	79,440	286,256	87,494	218,736	875	0	32,744,983
365.00	24,137,780	2.35	0.83		882,112		237,089	73,509	310,598	119,955	99,563	0	0	24,572,038
365.10	6,001,167	2.44					98,803	0	98,803	0	0	0	0	6,495,180
366.00	2,398,624	1.87	0.35		764		11,946	64	12,010	496	174	0	0	2,455,251
367.00	20,895,527	2.20	1.13		236,809		124,687	19,734	144,421	44,230	49,980	0	0	21,079,290
368.00	34,173,620	2.69	0.22		280,640		245,901	23,387	269,288	45,072	9,916	0	0	35,236,029
369.00	19,527,568	1.33	2.00		132,800		43,284	11,067	54,350	6,028	12,056	0	0	19,708,295
370.10	4,172,215	9.04			701		279,664	58	279,722	0	0	0	0	5,554,953
371.00	2,537,778	2.14			8,578		6,764	715	7,479	0	0	0	0	2,579,171
373.10	4,354,501	3.07	0.46		49,189		19,738	4,099	23,837	606	279	0	0	4,469,126
373.20	12,276	2.72			7,424		57	619	675	0	0	0	0	15,653
390.10	2,924,083	1.84	0.10		3,948		9,434	329	9,763	3	0	0	0	2,972,880
390.20	8,682	2.25					77	0	77	0	0	0	0	9,069
391.10	303,892	15.57			5,578		5,214	0	5,214	0	0	0	0	329,960
391.20	872,137	9.54					9,470	465	9,934	0	0	0	0	921,809
391.25	973,710	19.37			(1,062)		52,371	0	52,371	0	0	0	0	1,232,820
392.00	219,487	11.38					5,641	(89)	5,553	0	0	0	0	247,252
393.00	69,790	8.80					919	0	919	0	0	0	0	74,385
394.00	518,553	9.24					15,191	0	15,191	0	0	0	0	594,507
395.00	12,587	4.99					124	0	124	0	0	0	0	13,209
396.00	216,813	5.87					2,255	0	2,255	0	0	0	0	228,089
397.00	166,789	9.92					18,038	0	18,038	0	0	0	0	256,035
398.00	25,331	1.72					175	0	175	0	0	0	0	26,208
301.00	0	0.00					0	0	0	0	0	0	0	0
302.00	772	0.00					0	0	0	0	0	0	0	772
350.10	0	0.00					0	0	0	0	0	0	0	0
350.20	0	0.00					0	0	0	0	0	0	0	0
360.10	0	0.00					0	0	0	0	0	0	0	0
360.20	0	0.00					0	0	0	0	0	0	0	0
374.00	2,352	0.00					0	0	0	0	0	0	0	2,352
389.10	0	0.00					0	0	0	0	0	0	0	0
389.20	0	0.00					0	0	0	0	0	0	0	0
399.10	21,479	0.00					0	0	0	0	0	0	0	21,479
Total	190,179,221				2,755,303		1,643,669	229,609	1,873,267	346,110	412,021	875	0	195,655,824

MONTHLY RESERVE BRINGFORWARD FOR FTTY 2017

Account	2017													
	JUNE													
	2016 DECEMBER 31 Begin. Balance	FTY Rates 2016	COR % of Rets	Salvage % of Rets	Amort of NS 2012-2016	'5-yr Amort of NS	Avg. Accruals	Amort. of NS	Accruals	Retirements	Cost of Removal	Salvage	Acquisitions	Ending Balance
303.00	9,647,740	5.20					53,869	0	53,869	0	0	0	0	9,967,271
303.10	698,001	14.69					61,249	0	61,249	0	0	0	0	1,034,981
352.10	528,270	0.80			310		510	26	536	0	0	0	0	531,483
352.20	105,041	1.35					220	0	220	0	0	0	0	106,359
353.00	4,689,714	0.82			9,881		4,385	823	5,209	0	0	0	0	4,720,967
354.00	7,529	0.07					0	0	0	0	0	0	0	7,532
355.00	892,544	1.86			21,628		4,380	1,802	6,182	0	0	0	0	929,636
356.00	958,466	1.61			5,356		3,652	446	4,098	0	0	0	0	983,056
357.00	54,742	1.56					84	0	84	0	0	0	0	55,246
358.00	29,751	1.71					51	0	51	0	0	0	0	30,059
359.00	5,119	1.22					6	0	6	0	0	0	0	5,158
361.10	554,152	1.28					1,406	0	1,406	427	0	0	0	559,968
361.20	202,121	1.38					516	0	516	0	0	0	0	205,217
362.00	14,463,798	2.70	0.51		157,368		122,803	13,114	135,917	41,800	21,318	0	0	14,887,895
364.00	32,854,720	2.17	2.50	0.01	953,279		208,240	79,440	287,680	87,494	218,736	875	0	32,727,308
365.00	24,137,780	2.35	0.83		882,112		239,203	73,509	312,712	119,955	99,563	0	0	24,665,232
365.10	6,001,167	2.44					98,803	0	98,803	0	0	0	0	6,593,983
366.00	2,398,624	1.87	0.35		764		11,953	64	12,016	496	174	0	0	2,466,598
367.00	20,895,527	2.20	1.13		236,809		125,417	19,734	145,151	44,230	48,980	0	0	21,130,232
368.00	34,173,620	2.69	0.22		280,640		246,811	23,387	270,197	45,072	9,916	0	0	35,451,239
369.00	19,527,568	1.33	2.00		132,800		43,344	11,067	54,410	6,028	12,056	0	0	19,744,621
370.10	4,172,215	9.04			701		281,251	58	281,310	0	0	0	0	5,836,263
371.00	2,537,778	2.14			8,578		6,764	715	7,479	0	0	0	0	2,582,649
373.10	4,354,501	3.07	0.46		49,189		19,752	4,099	23,851	606	279	0	0	4,492,092
373.20	12,276	2.72			7,424		57	619	675	0	0	0	0	16,328
390.10	2,924,083	1.84	0.10		3,948		9,434	329	9,763	3	0	0	0	2,982,640
390.20	8,682	2.25					77	0	77	0	0	0	0	9,147
391.10	303,892	15.57			5,578		3,633	0	3,633	243,607	0	0	0	89,886
391.20	872,137	9.54					6,248	465	6,713	810,405	0	0	0	118,118
391.25	973,710	19.37			(1,062)		52,646	0	52,646	0	0	0	0	1,285,466
392.00	219,487	11.38					5,641	(89)	5,553	0	0	0	0	252,805
393.00	69,790	8.80					833	0	833	23,403	0	0	0	51,815
394.00	518,553	9.24					13,817	0	13,817	356,932	0	0	0	251,392
395.00	12,587	4.99					108	0	108	8,003	0	0	0	5,314
396.00	216,813	5.87					2,255	0	2,255	0	0	0	0	230,344
397.00	166,789	9.92					17,474	0	17,474	159,458	0	0	0	114,051
398.00	25,331	1.72					157	0	157	26,160	0	0	0	205
301.00	0	0.00					0	0	0	0	0	0	0	0
302.00	772	0.00					0	0	0	0	0	0	0	772
350.10	0	0.00					0	0	0	0	0	0	0	0
350.20	0	0.00					0	0	0	0	0	0	0	0
360.10	0	0.00					0	0	0	0	0	0	0	0
360.20	0	0.00					0	0	0	0	0	0	0	0
374.00	2,352	0.00					0	0	0	0	0	0	0	2,352
389.10	0	0.00					0	0	0	0	0	0	0	0
389.20	0	0.00					0	0	0	0	0	0	0	0
399.10	21,479	0.00					0	0	0	0	0	0	0	21,479
Total	190,179,221				2,755,303		1,647,048	229,609	1,876,656	1,974,078	412,021	875	0	195,147,256

MONTHLY RESERVE BRINGFORWARD FOR FTTY 2017

Account	2016		FTY Rates 2016	COR % of Rets	Salvage % of Rets	5-yr Amort of NS 2012-2016	2017							
	DECEMBER 31						JULY							
	Begin. Balance						Avg. Accruals	Amort. of NS	Accruals	Retirements	Cost of Removal	Salvage	Acquisitions	Ending Balance
303.00	9,647,740	5.20					54,115	0	54,115	0	0	0	0	10,021,386
303.10	698,001	14.69					63,284	0	63,284	0	0	0	0	1,098,264
352.10	528,270	0.80				310	510	26	536	0	0	0	0	532,019
352.20	105,041	1.35					220	0	220	0	0	0	0	106,578
353.00	4,689,714	0.82				9,881	4,385	823	5,209	0	0	0	0	4,726,176
354.00	7,529	0.07					0	0	0	0	0	0	0	7,532
355.00	892,544	1.86				21,628	4,380	1,802	6,182	0	0	0	0	935,818
356.00	958,466	1.61				5,356	3,652	446	4,098	0	0	0	0	987,155
357.00	54,742	1.56					84	0	84	0	0	0	0	55,330
358.00	29,751	1.71					51	0	51	0	0	0	0	30,111
359.00	5,119	1.22					6	0	6	0	0	0	0	5,164
361.10	554,152	1.28					1,410	0	1,410	427	0	0	0	560,951
361.20	202,121	1.38					516	0	516	0	0	0	0	205,733
362.00	14,463,798	2.70	0.51			157,368	123,649	13,114	136,763	41,800	0	0	0	14,961,540
364.00	32,854,720	2.17	2.50	0.01		963,279	209,664	79,440	289,104	87,484	218,736	875	0	32,711,056
365.00	24,137,780	2.35	0.83			882,112	241,317	73,509	314,826	119,955	99,563	0	0	24,760,540
365.10	6,001,167	2.44					98,803	0	98,803	0	0	0	0	6,692,785
366.00	2,396,624	1.87	0.35			764	11,960	64	12,023	496	174	0	0	2,477,991
367.00	20,835,527	2.20	1.13			236,809	126,147	19,734	145,881	44,230	49,980	0	0	21,181,904
368.00	34,173,620	2.69	0.22			280,640	247,720	23,387	271,107	45,072	9,916	0	0	35,667,358
369.00	19,527,568	1.33	2.00			132,800	43,404	11,067	54,471	6,028	12,056	0	0	19,781,007
370.10	4,172,215	9.04				701	282,839	58	282,897	0	0	0	0	6,119,160
371.00	2,537,778	2.14				8,578	6,764	715	7,479	0	0	0	0	2,590,128
373.10	4,354,501	3.07	0.46			49,189	19,766	4,099	23,865	606	279	0	0	4,515,073
373.20	12,276	2.72				7,424	57	619	675	0	0	0	0	17,003
390.10	2,924,083	1.84	0.10			3,948	9,434	329	9,763	3	0	0	0	2,992,399
390.20	8,682	2.25					77	0	77	0	0	0	0	9,224
391.10	303,892	15.57					2,053	0	2,053	0	0	0	0	92,038
391.20	872,137	9.54				5,578	3,027	465	3,492	0	0	0	0	121,610
391.25	973,710	19.37					52,920	0	52,920	0	0	0	0	1,338,386
392.00	219,487	11.38				(1,062)	5,641	(89)	5,553	0	0	0	0	258,357
393.00	69,790	8.80					747	0	747	0	0	0	0	52,562
394.00	518,553	9.24					12,442	0	12,442	0	0	0	0	263,835
395.00	12,587	4.99					91	0	91	0	0	0	0	5,405
396.00	216,873	5.87					2,255	0	2,255	0	0	0	0	232,600
397.00	166,789	9.92					16,909	0	16,909	0	0	0	0	130,960
398.00	25,331	1.72					138	0	138	0	0	0	0	343
301.00	0	0.00					0	0	0	0	0	0	0	0
302.00	772	0.00					0	0	0	0	0	0	0	772
350.10	0	0.00					0	0	0	0	0	0	0	0
350.20	0	0.00					0	0	0	0	0	0	0	0
360.10	0	0.00					0	0	0	0	0	0	0	0
360.20	0	0.00					0	0	0	0	0	0	0	0
374.00	2,352	0.00					0	0	0	0	0	0	0	2,352
389.10	0	0.00					0	0	0	0	0	0	0	0
389.20	0	0.00					0	0	0	0	0	0	0	0
389.10	21,479	0.00					0	0	0	0	0	0	0	21,479
Total	190,179,221					2,755,303	1,650,437	229,609	1,880,045	346,110	412,021	875	0	196,270,045

MONTHLY RESERVE BRINGFORWARD FOR FTY 2017

Account	2016		FTY Rates 2016	COR % of Rets	Salvage % of Rets	5-yr Amort of NS 2012-2016	2017							
	DECEMBER 31						AUGUST							
	Begin. Balance						Avg. Accruals	Amort. of NS	Accruals	Retirements	Cost of Removal	Salvage	Acquisitions	Ending Balance
303.00	9,647,740		5.20				54,360	0	54,360	0	0	0	0	10,075,746
303.10	698,001		14.69				65,318	0	65,318	0	0	0	0	1,163,582
352.10	528,270		0.60			310	510	26	536	0	0	0	0	532,555
352.20	105,041		1.35				220	0	220	0	0	0	0	106,798
353.00	4,689,714		0.82			9,881	4,365	823	5,209	0	0	0	0	4,731,385
354.00	7,529		0.07				0	0	0	0	0	0	0	7,533
355.00	892,544		1.86			21,628	4,380	1,802	6,182	0	0	0	0	942,000
356.00	958,466		1.61			5,356	3,652	446	4,098	0	0	0	0	991,253
357.00	54,742		1.56				84	0	84	0	0	0	0	55,414
358.00	29,751		1.71				51	0	51	0	0	0	0	30,162
359.00	5,119		1.22				6	0	6	0	0	0	0	5,170
361.10	554,152		1.28				1,414	0	1,414	427	0	0	0	561,939
361.20	202,121		1.38				516	0	516	0	0	0	0	206,249
362.00	14,463,798		2.70	0.51		157,368	124,496	13,114	137,610	41,800	21,318	0	0	15,036,032
364.00	32,894,720		2.17	2.50	0.01	953,279	211,086	79,440	290,528	87,494	218,736	875	0	32,696,229
365.00	24,137,780		2.35	0.83		882,112	243,431	73,509	316,940	119,955	99,563	0	0	24,857,963
365.10	6,001,167		2.44				98,803	0	98,803	0	0	0	0	6,791,588
366.00	2,398,624		1.87	0.35		764	11,967	64	12,030	496	174	0	0	2,489,311
367.00	20,835,527		2.20	1.13		236,809	126,877	19,734	146,611	44,230	49,980	0	0	21,234,305
368.00	34,173,620		2.69	0.22		280,640	248,629	23,387	272,016	45,072	9,916	0	0	35,884,387
369.00	19,527,568		1.33	2.00		132,800	43,464	11,067	54,531	6,028	12,056	0	0	19,617,453
370.10	4,172,215		9.04			701	284,426	58	284,484	0	0	0	0	6,403,645
371.00	2,537,778		2.14			8,578	6,764	715	7,479	0	0	0	0	2,597,606
373.10	4,354,501		3.07	0.46		49,189	19,780	4,099	23,879	606	279	0	0	4,538,068
373.20	12,276		2.72			7,424	57	619	675	0	0	0	0	17,679
390.10	2,924,083		1.84	0.10		3,948	9,434	329	9,763	3	0	0	0	3,002,159
390.20	8,682		2.25				77	0	77	0	0	0	0	9,301
391.10	303,892		15.57				2,053	0	2,053	0	0	0	0	94,091
391.20	872,137		9.54			5,578	3,027	465	3,492	0	0	0	0	125,101
391.25	973,710		19.37				53,195	0	53,195	0	0	0	0	1,391,580
392.00	219,487		11.38			(1,062)	5,641	(89)	5,553	0	0	0	0	263,910
393.00	69,790		8.80				747	0	747	0	0	0	0	53,309
394.00	518,553		9.24				12,442	0	12,442	0	0	0	0	276,277
395.00	12,587		4.99				91	0	91	0	0	0	0	5,496
396.00	216,813		5.87				2,255	0	2,255	0	0	0	0	234,855
397.00	166,789		9.92				17,004	0	17,004	0	0	0	0	147,964
398.00	25,331		1.72				138	0	138	0	0	0	0	480
301.00	0		0.00				0	0	0	0	0	0	0	0
302.00	772		0.00				0	0	0	0	0	0	0	772
350.10	0		0.00				0	0	0	0	0	0	0	0
350.20	0		0.00				0	0	0	0	0	0	0	0
360.10	0		0.00				0	0	0	0	0	0	0	0
360.20	0		0.00				0	0	0	0	0	0	0	0
374.00	2,352		0.00				0	0	0	0	0	0	0	2,352
389.10	0		0.00				0	0	0	0	0	0	0	0
389.20	0		0.00				0	0	0	0	0	0	0	0
399.10	21,479		0.00				0	0	0	0	0	0	0	21,479
Total	190,179,221					2,755,303	1,660,782	229,609	1,890,390	346,110	412,021	875	0	197,403,179

MONTHLY RESERVE BRINGFORWARD FOR FTY 2017

Account	2016		FTY Rates 2016	COR % of Rets	Salvage % of Rets	5-yr Amort of NS 2012-2016	2017							Ending Balance
	DECEMBER 31						SEPTEMBER							
	Begin. Balance						Avg. Accruals	Amort. of NS	Accruals	Retirements	Cost of Removal	Salvage	Acquisitions	
303.00	9,647,740		5.20				54,606	0	54,606	0	0	0	0	10,130,352
303.10	698,001		14.69				67,352	0	67,352	0	0	0	0	1,230,935
352.10	528,270		0.80			310	510	26	536	0	0	0	0	533,090
352.20	105,041		1.35				220	0	220	0	0	0	0	107,018
353.00	4,689,714		0.82			9,881	4,385	823	5,209	0	0	0	0	4,736,594
354.00	7,529		0.07				0	0	0	0	0	0	0	7,533
355.00	892,544		1.86			21,628	4,380	1,802	6,182	0	0	0	0	948,181
356.00	958,466		1.61			5,356	3,652	446	4,098	0	0	0	0	995,351
357.00	54,742		1.56				84	0	84	0	0	0	0	55,498
358.00	29,751		1.71				51	0	51	0	0	0	0	30,214
359.00	5,119		1.22				6	0	6	0	0	0	0	5,177
361.10	554,152		1.28				1,418	0	1,418	427	0	0	0	562,931
361.20	202,121		1.38				516	0	516	0	0	0	0	206,765
362.00	14,463,798		2.70	0.51		157,368	125,342	13,114	138,456	41,800	21,318	0	0	15,111,371
364.00	32,854,720		2.17	2.50	0.01	953,279	212,512	79,440	291,952	87,494	218,736	875	0	32,682,825
365.00	24,137,780		2.35	0.83		882,112	245,545	73,509	319,055	119,955	99,563	0	0	24,957,500
365.10	6,001,167		2.44				98,803	0	98,803	0	0	0	0	6,890,390
366.00	2,398,624		1.87	0.35		764	11,974	64	12,037	496	174	0	0	2,500,679
367.00	20,895,527		2.20	1.13		236,809	127,606	19,734	147,340	44,230	49,980	0	0	21,287,436
368.00	34,173,620		2.69	0.22		280,640	249,539	23,387	272,925	45,072	9,916	0	0	36,102,324
369.00	19,527,568		1.33	2.00		132,800	43,524	11,067	54,591	6,028	12,056	0	0	19,853,959
370.10	4,172,215		9.04			701	286,013	58	286,072	0	0	0	0	6,689,716
371.00	2,537,778		2.14				6,764	715	7,479	0	0	0	0	2,605,085
373.10	4,354,501		3.07	0.46		49,189	19,794	4,099	23,893	606	279	0	0	4,561,076
373.20	12,276		2.72			7,424	57	619	675	0	0	0	0	18,354
390.10	2,924,083		1.84	0.10		3,948	9,434	329	9,763	3	0	0	0	3,011,919
390.20	8,682		2.25				77	0	77	0	0	0	0	9,379
391.10	303,892		15.57				2,053	0	2,053	0	0	0	0	96,144
391.20	872,137		9.54			5,578	3,027	465	3,492	0	0	0	0	128,593
391.25	973,710		19.37				53,469	0	53,469	0	0	0	0	1,445,049
392.00	219,487		11.38			(1,062)	5,641	(89)	5,553	0	0	0	0	269,463
393.00	69,790		8.80				747	0	747	0	0	0	0	54,057
394.00	518,553		9.24				12,442	0	12,442	0	0	0	0	286,720
395.00	12,587		4.99				91	0	91	0	0	0	0	5,587
396.00	216,813		5.87				2,255	0	2,255	0	0	0	0	237,110
397.00	166,789		9.92				17,098	0	17,098	0	0	0	0	165,062
398.00	25,331		1.72				138	0	138	0	0	0	0	618
301.00	0		0.00				0	0	0	0	0	0	0	0
302.00	772		0.00				0	0	0	0	0	0	0	772
350.10	0		0.00				0	0	0	0	0	0	0	0
350.20	0		0.00				0	0	0	0	0	0	0	0
360.10	0		0.00				0	0	0	0	0	0	0	0
360.20	0		0.00				0	0	0	0	0	0	0	0
374.00	2,352		0.00				0	0	0	0	0	0	0	2,352
389.10	0		0.00				0	0	0	0	0	0	0	0
389.20	0		0.00				0	0	0	0	0	0	0	0
399.10	21,479		0.00				0	0	0	0	0	0	0	21,479
Total	190,179,221					2,755,303	1,671,127	229,609	1,900,735	346,110	412,021	875	0	198,546,658

MONTHLY RESERVE BRINGFORWARD FOR FTTY 2017

Account	2017												
	OCTOBER												
	2016 DECEMBER 31 Begin. Balance	FTY Rates 2016	COR % of Ret	Salvage % of Ret	5-yr Amort of NS 2012-2016	Avg. Accruals	Amort. of NS	Accruals	Retirements	Cost of Removal	Salvage	Acquisitions	Ending Balance
303.00	9,647,740	5.20				54,851	0	54,851	0	0	0	0	10,185,204
303.10	698,001	14.69				69,387	0	69,387	0	0	0	0	1,300,321
352.10	528,270	0.80			310	510	26	536	0	0	0	0	533,626
352.20	105,041	1.35				220	0	220	0	0	0	0	107,237
353.00	4,689,714	0.82			9,881	4,385	823	5,209	0	0	0	0	4,741,803
354.00	7,529	0.07				0	0	0	0	0	0	0	7,533
355.00	882,544	1.86			21,628	4,380	1,802	6,182	0	0	0	0	954,363
356.00	958,466	1.61			5,356	3,652	446	4,098	0	0	0	0	999,450
357.00	54,742	1.56				84	0	84	0	0	0	0	55,583
358.00	29,751	1.71				51	0	51	0	0	0	0	30,265
359.00	5,119	1.22				6	0	6	0	0	0	0	5,183
361.10	554,152	1.28				1,422	0	1,422	427	0	0	0	563,927
361.20	202,121	1.38				516	0	516	0	0	0	0	207,280
362.00	14,463,798	2.70	0.51		157,368	126,188	13,114	139,302	41,800	21,318	0	0	15,187,555
364.00	32,854,720	2.17	2.50	0.01	953,279	213,936	79,440	293,376	87,494	218,736	875	0	32,670,846
365.00	24,137,780	2.35	0.83		882,112	247,660	73,509	321,169	119,955	99,563	0	0	25,059,151
365.10	6,001,167	2.44				98,803	0	98,803	0	0	0	0	6,989,193
366.00	2,398,624	1.87	0.35		764	11,981	64	12,044	496	174	0	0	2,512,053
367.00	20,835,527	2.20	1.13		236,809	128,336	19,734	148,070	44,230	49,980	0	0	21,341,298
368.00	34,173,620	2.69	0.22		280,640	250,448	23,387	273,835	45,072	9,916	0	0	36,321,172
369.00	19,527,568	1.33	2.00		132,800	43,584	11,067	54,651	6,028	12,056	0	0	19,890,525
370.10	4,172,215	9.04			701	287,601	58	287,659	0	0	0	0	6,977,376
370.20	2,537,778	2.14			8,578	6,764	715	7,479	0	0	0	0	2,612,563
373.10	4,354,501	3.07	0.46		49,189	19,808	4,099	23,907	606	279	0	0	4,584,099
373.20	12,276	2.72			7,424	57	619	675	0	0	0	0	19,029
390.10	2,924,083	1.84	0.10		3,948	9,434	329	9,763	3	0	0	0	3,021,679
390.20	8,682	2.25				77	0	77	0	0	0	0	9,456
391.10	303,892	15.57				2,053	0	2,053	0	0	0	0	98,196
391.20	872,137	9.54			5,578	3,027	465	3,492	0	0	0	0	132,085
391.25	973,710	19.37			(1,062)	53,744	(89)	53,744	0	0	0	0	1,498,793
392.00	219,487	11.38				5,641	0	5,553	0	0	0	0	275,016
393.00	69,790	8.80				747	0	747	0	0	0	0	54,804
394.00	518,553	9.24				12,442	0	12,442	0	0	0	0	301,162
395.00	12,587	4.99				91	0	91	0	0	0	0	5,678
396.00	216,813	5.87				2,255	0	2,255	0	0	0	0	239,365
397.00	166,789	9.82				17,193	0	17,193	0	0	0	0	182,254
398.00	25,331	1.72				138	0	138	0	0	0	0	756
301.00	0	0.00				0	0	0	0	0	0	0	0
302.00	772	0.00				0	0	0	0	0	0	0	772
350.10	0	0.00				0	0	0	0	0	0	0	0
350.20	0	0.00				0	0	0	0	0	0	0	0
360.10	0	0.00				0	0	0	0	0	0	0	0
360.20	0	0.00				0	0	0	0	0	0	0	0
374.00	2,352	0.00				0	0	0	0	0	0	0	2,352
389.10	0	0.00				0	0	0	0	0	0	0	0
389.20	0	0.00				0	0	0	0	0	0	0	0
399.10	21,479	0.00				0	0	0	0	0	0	0	21,479
Total	190,179,221				2,755,303	1,681,472	229,609	1,911,081	346,110	412,021	875	0	199,700,482

MONTHLY RESERVE BRINGFORWARD FOR FTY 2017

Account	2016		FTY Rates 2016	COR % of Ret	Salvage % of Ret	5-yr Amort of NS 2012-2016	2017						Ending Balance	
	Begin. Balance	DECEMBER 31					NOVEMBER							
							Avg. Accruals	Amort. of NS	Accruals	Retirements	Cost of Removal	Salvage		Acquisitions
303.00	9,647,740		5.20				55,097	0	55,097	0	0	0	0	10,240,300
303.10	698,001		14.69				71,421	0	71,421	0	0	0	0	1,371,742
352.10	528,270		0.80		310		510	26	536	0	0	0	0	534,161
352.20	105,041		1.35				220	0	220	0	0	0	0	107,457
353.00	4,689,714		0.82		9.881		4,385	823	5,209	0	0	0	0	4,747,012
354.00	7,529		0.07				0	0	0	0	0	0	0	7,534
355.00	892,544		1.86				4,380	1,802	6,182	0	0	0	0	960,545
356.00	958,466		1.61		5.356		3,652	446	4,098	0	0	0	0	1,003,548
357.00	54,742		1.56				84	84	84	0	0	0	0	55,667
358.00	29,751		1.71				51	0	51	0	0	0	0	30,316
359.00	5,119		1.22				6	0	6	0	0	0	0	5,190
361.10	554,152		1.28				1,427	0	1,427	427	0	0	0	564,926
361.20	202,121		1.38				516	0	516	0	0	0	0	207,796
362.00	14,483,798		2.70	0.51		157,368	127,035	13,114	140,149	41,800	21,318	0	0	15,264,586
364.00	32,854,720		2.17	2.50	0.01	953,279	215,360	79,440	294,800	87,494	218,736	875	0	32,660,290
365.00	24,137,780		2.35	0.83		882,112	249,774	73,509	323,283	119,955	99,563	0	0	25,162,916
365.10	6,001,167		2.44				98,803	0	98,803	0	0	0	0	7,087,996
366.00	2,398,624		1.87	0.35		764	11,988	64	12,051	496	174	0	0	2,523,434
367.00	20,835,527		2.20	1.13		236,809	129,066	19,734	148,800	44,230	49,980	0	0	21,395,888
368.00	34,173,620		2.69	0.22		280,640	251,357	23,387	274,744	45,072	9,916	0	0	36,540,928
369.00	19,527,568		1.33	2.00		132,800	43,644	11,067	54,711	6,028	12,056	0	0	19,927,152
370.10	4,172,215		9.04			701	289,188	58	289,247	0	0	0	0	7,266,822
371.00	2,537,778		2.14			8,578	6,764	715	7,479	0	0	0	0	2,620,042
373.10	4,354,501		3.07	0.46		49,189	19,822	4,099	23,921	606	279	0	0	4,607,135
373.20	12,276		2.72			7,424	57	619	675	0	0	0	0	19,705
390.10	2,924,083		1.84	0.10		3,948	9,434	329	9,763	3	0	0	0	3,031,438
390.20	8,682		2.25				77	0	77	0	0	0	0	9,534
391.10	303,892		15.57				2,053	0	2,053	0	0	0	0	100,249
391.20	872,137		9.54			5,578	3,027	465	3,492	0	0	0	0	135,577
391.25	973,710		19.37				54,018	0	54,018	0	0	0	0	1,552,811
392.00	219,487		11.38		(1,062)		5,641	(89)	5,553	0	0	0	0	280,569
393.00	69,790		8.80				747	0	747	0	0	0	0	55,551
394.00	518,553		9.24				12,442	0	12,442	0	0	0	0	313,605
395.00	12,587		4.99				91	0	91	0	0	0	0	5,769
396.00	216,813		5.87				2,255	0	2,255	0	0	0	0	241,621
397.00	166,789		9.92				17,287	0	17,287	0	0	0	0	199,541
398.00	25,331		1.72				138	0	138	0	0	0	0	894
301.00	0		0.00				0	0	0	0	0	0	0	0
302.00	772		0.00				0	0	0	0	0	0	0	772
350.10	0		0.00				0	0	0	0	0	0	0	0
350.20	0		0.00				0	0	0	0	0	0	0	0
360.10	0		0.00				0	0	0	0	0	0	0	0
360.20	0		0.00				0	0	0	0	0	0	0	0
374.00	2,352		0.00				0	0	0	0	0	0	0	2,352
389.10	0		0.00				0	0	0	0	0	0	0	0
389.20	0		0.00				0	0	0	0	0	0	0	0
399.10	21,479		0.00				0	0	0	0	0	0	0	21,479
Total	190,179,221					2,755,303	1,691,817	229,609	1,921,426	346,110	412,021	875	0	200,864,652

MONTHLY RESERVE BRINGFORWARD FOR FTTY 2017

Account	2016		FTY Rates 2016	COR % of Ret	Salvage % of Ret	'5-yr Amort of NS 2012-2016	2017						
	DECEMBER 31						DECEMBER						
	Begin. Balance						Avg. Accruals	Amort. of NS	Accruals	Retirements	Cost of Removal	Salvage Acquisitions	Ending Balance
303.00	9,647,740		5.20				55,342	0	55,342	0	0	0	10,295,643
303.10	698,001		14.69				73,455	0	73,455	0	0	0	1,445,197
352.10	528,270		0.80			310	510	26	536	0	0	0	534,697
352.20	105,041		1.35				220	0	220	0	0	0	107,676
353.00	4,689,714		0.82			9,881	4,385	823	5,209	0	0	0	4,752,220
354.00	7,529		0.07				0	0	0	0	0	0	7,534
355.00	892,544		1.86			21,628	4,380	1,802	6,182	0	0	0	966,727
356.00	956,466		1.61			5,356	3,652	446	4,098	0	0	0	1,007,646
357.00	54,742		1.56				84	0	84	0	0	0	55,751
358.00	29,751		1.71				51	0	51	0	0	0	30,368
359.00	5,119		1.22				6	0	6	0	0	0	5,196
361.10	554,152		1.28				1,431	0	1,431	427	0	0	565,931
361.20	202,121		1.38				516	0	516	0	0	0	208,312
362.00	14,463,798		2.70	0.51		157,368	127,881	13,114	140,995	41,800	21,318	0	15,342,464
364.00	32,854,720		2.17	2.50	0.01	953,279	216,784	79,440	296,224	87,494	218,736	875	32,651,158
365.00	24,137,780		2.35	0.83		882,112	251,888	73,509	325,397	119,955	99,563	0	25,268,796
365.10	6,001,167		2.44				98,803	0	98,803	0	0	0	7,186,798
366.00	2,398,624		1.87	0.35		764	11,995	64	12,058	496	174	0	2,534,821
367.00	20,835,527		2.20	1.13		236,809	129,796	19,734	149,530	44,230	49,980	0	21,451,209
368.00	34,173,620		2.69	0.22		280,640	252,267	23,387	275,653	45,072	9,916	0	36,761,594
369.00	19,527,568		1.33	2.00		132,800	43,705	11,067	54,771	6,028	12,056	0	19,963,837
370.10	4,172,215		9.04			701	290,775	58	290,834	0	0	0	7,557,456
371.00	2,537,778		2.14			8,578	6,764	715	7,479	0	0	0	2,627,521
373.10	4,354,501		3.07	0.46		49,189	19,836	4,099	23,935	606	279	0	4,630,185
373.20	12,276		2.72			7,424	57	619	675	0	0	0	20,380
390.10	2,924,083		1.84	0.10		3,948	9,434	329	9,763	3	0	0	3,041,198
390.20	8,682		2.25				77	0	77	0	0	0	9,611
391.10	303,892		15.57				2,053	0	2,053	0	0	0	102,302
391.20	872,137		9.54			5,578	3,027	465	3,492	0	0	0	139,068
391.25	973,710		19.37			(1,062)	54,293	0	54,293	0	0	0	1,607,103
392.00	219,487		11.38				5,641	(89)	5,553	0	0	0	286,122
393.00	69,790		8.60				747	0	747	0	0	0	56,298
394.00	518,553		9.24				12,442	0	12,442	0	0	0	326,047
395.00	12,587		4.99				91	0	91	0	0	0	5,860
396.00	216,813		5.87				2,255	0	2,255	0	0	0	243,876
397.00	166,789		9.92				17,382	0	17,382	0	0	0	216,923
398.00	25,331		1.72				132	0	132	0	0	0	1,026
301.00	0		0.00				0	0	0	0	0	0	0
302.00	772		0.00				0	0	0	0	0	0	772
350.10	0		0.00				0	0	0	0	0	0	0
350.20	0		0.00				0	0	0	0	0	0	0
360.10	0		0.00				0	0	0	0	0	0	0
360.20	0		0.00				0	0	0	0	0	0	0
374.00	2,352		0.00				0	0	0	0	0	0	2,352
389.10	0		0.00				0	0	0	0	0	0	0
389.20	0		0.00				0	0	0	0	0	0	0
399.10	21,479		0.00				0	0	0	0	0	0	21,479
Total	190,179,221					2,755,303	1,702,156	229,609	1,931,765	346,110	412,021	875	202,039,154

PENNSYLVANIA POWER COMPANY

READING, PENNSYLVANIA

2015 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION
ACCRUALS RELATED TO ELECTRIC PLANT
AS OF DECEMBER 31, 2015

Prepared by:



Excellence Delivered As Promised

PENNSYLVANIA POWER COMPANY
Reading, Pennsylvania

2015 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO ELECTRIC PLANT
AS OF DECEMBER 31, 2015

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC
Camp Hill, Pennsylvania



Excellence Delivered As Promised

April 8, 2016

Pennsylvania Power Company
2800 Pottsville Pike
Reading, PA 19605-2459

Attention Mr. Charles V. Fullem
Director, Rates & Regulatory Affairs - PA

Ladies and Gentlemen:

Pursuant to your request, we have determined the annual depreciation accruals applicable to electric plant as of December 31, 2015. Summaries of the original cost, annual accruals and the book depreciation reserve are presented in Tables 1 and 2, beginning on page I-3 of the attached report.

A description of the methods and procedures upon which the study was based is set forth in a companion report, "2016 Depreciation Study - Calculated Annual Depreciation Accruals Related to Electric Plant as of December 31, 2016".

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

A handwritten signature in black ink that reads "John J. Spanos".

JOHN J. SPANOS
Sr. Vice President

JJS:krm

061041.003

Gannett Fleming Valuation and Rate Consultants, LLC

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PART I. RESULTS OF STUDY

**PENNSYLVANIA POWER COMPANY
DEPRECIATION STUDY**

PART I. RESULTS OF STUDY

DESCRIPTION OF SUMMARY TABULATIONS

The results of the depreciation study are summarized in Table 1, which sets forth the calculated annual depreciation related to Electric Plant in Service as of December 31, 2015. Table 2 presents the experienced salvage and cost of removal associated with regular retirements during the five-year period, 2011-2015 and the annual amortization of net salvage.

DETAILED TABULATIONS OF DEPRECIATION CALCULATIONS

The supporting data for the depreciation calculations are presented in account sequence in the section beginning on II-7. The original cost, calculated accrued depreciation, allocated book reserve, future accruals, remaining life and annual accrual are shown for each vintage of each account or subaccount. The amounts of regular retirements, gross salvage and cost of removal are set forth by account for the years 2011 through 2015, beginning on beginning on III-2 through III-4.

PENNSYLVANIA POWER COMPANY

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO ELECTRIC PLANT AS OF DECEMBER 31, 2015

	ACCOUNT (1)	SURVIVOR CURVE (2)	ORIGINAL COST (3)	BOOK DEPRECIATION RESERVE (4)	FUTURE ACCRUALS (5)	CALCULATED ANNUAL ACCRUAL AMOUNT (6)	ANNUAL ACCURAL RATE (7)=(6)/(3)	COMPOSITE REMAINING LIFE (8)=(5)/(6)
	ELECTRIC PLANT							
	INTANGIBLE PLANT							
303	MISCELLANEOUS INTANGIBLE PLANT	7-SQ	11,721,275.67	9,014,763	2,706,513	622,981	5.31	4.3
303.1	MISCELLANEOUS INTANGIBLE PLANT - SMART METER SOFTWARE	7-SQ	2,031,840.91	181,335	2,850,505	422,750	14.93	6.3
	TOTAL INTANGIBLE PLANT		14,553,116.58	9,196,098	5,357,019	1,045,731	7.19	
	TRANSMISSION PLANT							
352.1	STRUCTURES AND IMPROVEMENTS	65-R4	784,597.99	521,767	242,831	6,178	0.81	39.3
352.2	STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	65-R4	195,215.93	102,385	52,830	2,653	1.35	35.0
353	STATION EQUIPMENT	58-R2	6,417,733.78	4,625,924	1,791,810	53,726	0.84	33.4
354	TOWERS AND FIXTURES	70-R4	7,576.09	7,524	52	5	0.07	10.4
355	POLES AND FIXTURES	62-R1.5	2,683,169.35	890,609	1,792,560	46,520	1.81	36.9
355	OVERHEAD CONDUCTORS AND DEVICES	62-R2	2,722,010.42	907,380	1,814,630	45,786	1.68	39.6
357	UNDERGROUND CONDUIT	45-S2.5	64,653.85	53,669	10,985	1,071	1.66	10.3
358	UNDERGROUND CONDUCTORS AND DEVICES	40-S1.5	36,071.32	29,095	6,976	655	1.82	10.7
359	ROADS AND TRAILS	55-S2.5	6,324.44	5,040	1,284	79	1.25	15.3
	TOTAL TRANSMISSION PLANT		12,897,353.16	7,143,394	5,753,958	158,673	1.23	
	DISTRIBUTION PLANT							
361.1	STRUCTURES AND IMPROVEMENTS	65-R3	1,278,979.53	539,671	739,309	16,377	1.28	45.1
361.2	STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	65-R3	448,648.71	195,665	252,984	6,217	1.39	40.7
362	STATION EQUIPMENT	50-R0.5	50,740,000.97	13,149,461	37,590,540	1,447,957	2.85	26.0
364	POLES, TOWERS AND FIXTURES	55-R2	102,990,681.14	33,057,699	69,933,182	2,160,605	2.10	32.4
365	OVERHEAD CONDUCTORS AND DEVICES	60-R1	105,186,441.33	23,093,526	82,072,915	2,411,470	2.29	34.0
365.1	OVERHEAD CONDUCTORS AND DEVICES - CLEARING AND GRADING	60-R1	48,591,447.12	4,737,769	43,853,658	1,263,545	2.60	34.7
366	UNDERGROUND CONDUIT	60-R2.5	7,586,389.20	2,263,193	5,323,196	143,368	1.89	37.1
367	UNDERGROUND CONDUCTORS AND DEVICES	50-R2.5	61,907,393.97	26,338,558	41,568,806	1,332,747	2.15	31.2
368	LINE TRANSFORMERS	44-R1.5	102,954,358.05	31,687,458	71,276,900	2,804,617	2.72	29.4
369	SERVICES	55-R4	38,032,758.97	19,152,873	18,879,886	499,809	1.31	37.8
370.1	METERS - SMART GRID	15-S0.5	27,496,026.66	1,127,995	26,368,042	59,457	9.56	10.0
371	INSTALLATIONS ON CUSTOMERS' PREMISES	33-R2	3,792,737.59	2,443,141	1,349,597	65,457	2.25	15.6
373.1	STREET LIGHTING AND SIGNAL SYSTEMS	27-R2	7,616,561.05	4,050,257	3,566,304	251,642	3.30	14.2
373.2	STREET LIGHTING AND SIGNAL SYSTEMS - ESP	27-R2	24,999.70	3,650	21,310	1,163	4.65	18.3
	TOTAL DISTRIBUTION PLANT		558,638,393.90	155,841,166	402,797,209	15,052,940	2.69	

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO ELECTRIC PLANT AS OF DECEMBER 31, 2015

	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)(3)	(8)=(5)(6)
	ACCOUNT	SURVIVOR CURVE	ORIGINAL COST	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	ACCUMULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	GENERAL PLANT							
350.1	STRUCTURES AND IMPROVEMENTS	50-R2.5	5,609,642.50	2,084,153	2,725,490	98,657	1.75	27.6
350.2	STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	50-R2.5	41,259.15	7,740	33,559	943	2.28	55.6
391.1	OFFICE FURNITURE AND EQUIPMENT	20-SQ	739,892.78	585,872	154,021	86,635	11.71	1.8
391.2	DATA PROCESSING EQUIPMENT	5-SQ	1,691,472.02	1,255,574	625,899	415,759	21.98	1.5
391.25	DATA PROCESSING EQUIPMENT - SMART GRID	5-SQ	2,492,616.52	454,082	2,048,535	474,287	19.10	4.3
392	TRANSPORTATION EQUIPMENT	10-L2	584,877.72	144,048	450,830	76,527	12.86	5.9
393	STORES EQUIPMENT	30-SQ	171,743.17	106,057	63,666	10,620	6.18	6.0
384	TOOLS, SHOP AND GARAGE EQUIPMENT	25-SQ	2,433,042.03	785,493	1,647,549	230,571	9.48	7.1
395	LABORATORY EQUIPMENT	20-SQ	72,967.58	53,514	19,454	3,512	4.81	5.5
396	POWER OPERATED EQUIPMENT	18-S1.5	461,035.33	188,459	272,576	28,394	6.15	9.6
397	COMMUNICATION EQUIPMENT	15-SQ	2,126,867.96	173,298	2,012,570	337,384	15.97	6.0
398	MISCELLANEOUS EQUIPMENT	20-SQ	63,789.95	47,702	16,089	10,010	15.69	1.6
	TOTAL GENERAL PLANT		16,688,247.00	6,517,892	10,070,257	1,773,238	10.63	
	TOTAL DEPRECIABLE PLANT		602,777,110.64	178,798,670	423,978,443	18,030,582	2.99	
	NONDEPRECIABLE							
301	ORGANIZATION		22,833.53					
302	FRANCHISES AND CONSENTS		68,665.87	772				
350.1	LAND		2,089,804.27					
350.2	EASEMENTS		8,430,107.46					
360.1	LAND		576,436.76					
360.2	EASEMENTS		5,802,670.46	2,352				
374	DISTRIBUTION PLANT ARO		4,407.74					
389.1	LAND		226,639.25					
389.2	EASEMENTS		310.93					
399.1	GENERAL PLANT ARO		32,875.01	21,479				
	TOTAL NONDEPRECIABLE PLANT		17,256,971.38	24,603				
	TOTAL ELECTRIC PLANT		620,034,082.02	178,823,273	423,978,443	18,030,582		

* Indicates the use of an interim survivor curve and December 2020 retirement date.

PENNSYLVANIA POWER COMPANY

TABLE 2. AMORTIZATION OF EXPERIENCED NET SALVAGE

Account (1)	2011		2012		2013		2014		2015		Net Salvage (12)	Salvage Accrual (13)=(12)/5
	Cost of Removal (2)	Gross Salvage (3)	Cost of Removal (4)	Gross Salvage (5)	Cost of Removal (6)	Gross Salvage (7)	Cost of Removal (8)	Gross Salvage (9)	Cost of Removal (10)	Gross Salvage (11)		
352.1							1,549.65				(1,549.65)	(310)
353					48,560.22		844.17				(49,404.39)	(9,881)
355			35,861.06		3,252.85		22,084.12		2,167.61		(63,365.64)	(12,673)
356.1			11,667.87		51.26		12,111.73		2,948.95		(26,779.83)	(5,356)
362	1,520.83				520,665.89		166,530.97		1,316.45		(690,034.14)	(138,007)
364	353,850.62	4,269.78	468,356.42		1,092,276.41	167.86	467,551.73	1,482.81	572,486.14		(2,946,630.87)	(589,726)
365	327,347.54	19,772.29	519,867.34		1,227,445.37	80.32	970,948.36	31.81	688,375.24		(3,712,099.43)	(742,420)
366					439.41		1,082.54		56.38		(1,578.33)	(316)
367	1,156.79	41.83	15,595.25		408,750.48		187,384.00		46,435.35		(653,280.04)	(130,656)
368	5,241.26	81.21	185,933.76		510,189.38		323,360.85		285,595.58		(1,310,239.62)	(262,048)
369	161,672.05	2,916.59	140,833.72		149,726.71		97,706.45	1.41	103,281.74		(656,302.67)	(130,061)
370.1					3,513.53				(6.31)		(3,507.22)	(701)
371	4,187.36	577.25	12,634.18		17,617.70		9,162.55		3,474.90		(46,499.44)	(9,300)
373.1	69,806.83	390.14	69,812.69		62,686.99		35,346.79		75,686.03		(312,725.47)	(62,545)
373.2			12,718.49		23,946.56		453.42				(37,118.47)	(7,424)
390.1											(13,712.56)	(2,743)
391.2											(27,891.33)	(5,578)
392					27,891.33					5,309.70	5,309.70	1,062
TOTAL	924,783.38	28,049.09	1,473,280.78	0.00	4,097,014.11	248.18	2,309,859.89	1,749.85	1,773,828.06	5,309.70	(10,543,409.40)	(2,108,683)

**PART II. DETAILED DEPRECIATION
CALCULATIONS**

CUMULATIVE DEPRECIATED ORIGINAL COST

PENNSYLVANIA POWER COMPANY

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	AMOUNT		DEPRECIATED ORIGINAL COST	
			(2)	(3)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
			(4)			
1892	13,916	13,916				0.0
1902	6,695	6,695				0.0
1905	232	232				0.0
1909	41	41				0.0
1910	100	100				0.0
1913	46,511	46,511				0.0
1916	62,979	62,767	212		212	0.0
1922	17	17			212	0.0
1923	4,035	3,940	95		307	0.0
1924	1,356	1,220	136		443	0.0
1925	217	217			443	0.0
1926	3,005	2,330	675		1,118	0.0
1927	49,682	46,625	3,057		4,175	0.0
1928	16,488	14,385	2,103		6,278	0.0
1929	104,855	94,894	9,961		16,239	0.0
1930	122,487	110,269	12,218		28,457	0.0
1931	15,271	12,333	2,938		31,395	0.0
1932	5,715	4,498	1,217		32,612	0.0
1933	5,630	4,436	1,194		33,806	0.0
1934	10,732	8,985	1,747		35,553	0.0
1935	10,629	8,146	2,483		38,036	0.0
1936	15,407	11,667	3,740		41,776	0.0
1937	65,546	52,684	12,862		54,638	0.0
1938	39,593	29,536	10,057		64,695	0.0
1939	51,676	42,923	8,753		73,448	0.0
1940	72,477	57,120	15,357		88,805	0.0
1941	46,515	35,589	10,926		99,731	0.0
1942	21,835	18,049	3,786		103,517	0.0
1943	12,554	9,975	2,579		106,096	0.0
1944	19,942	15,520	4,422		110,518	0.0
1945	40,281	30,636	9,645		120,163	0.0
1946	59,296	45,402	13,894		134,057	0.0
1947	143,846	115,284	28,562		162,619	0.0
1948	231,501	177,686	53,815		216,434	0.1
1949	340,726	284,099	56,627		273,061	0.1
1950	335,192	260,160	75,032		348,093	0.1
1951	444,929	370,558	74,371		422,464	0.1
1952	470,695	376,290	94,405		516,869	0.1
1953	633,533	490,741	142,792		659,661	0.2
1954	546,620	422,489	124,131		783,792	0.2
1955	404,771	311,017	93,754		877,546	0.2
1956	700,611	577,789	122,822		1,000,368	0.2
1957	679,155	508,694	170,461		1,170,829	0.3
1958	852,098	656,482	195,616		1,366,445	0.3
1959	844,816	636,095	208,721		1,575,166	0.4

PENNSYLVANIA POWER COMPANY

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	AMOUNT		DEPRECIATED ORIGINAL COST CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
			(2)	(3)		
			(4)			
1960	1,364,533	1,126,557		237,976	1,813,142	0.4
1961	764,223	553,625		210,598	2,023,740	0.5
1962	1,060,518	768,921		291,597	2,315,337	0.5
1963	849,189	618,986		230,203	2,545,540	0.6
1964	910,199	653,326		256,873	2,802,413	0.7
1965	1,107,859	788,695		319,164	3,121,577	0.7
1966	1,482,102	1,055,381		426,721	3,548,298	0.8
1967	1,853,489	1,313,930		539,559	4,087,857	1.0
1968	1,571,758	1,099,047		472,711	4,560,568	1.1
1969	1,582,800	1,107,473		475,327	5,035,895	1.2
1970	1,694,930	1,204,957		489,973	5,525,868	1.3
1971	2,158,335	1,519,827		638,508	6,164,376	1.5
1972	2,228,786	1,573,235		655,551	6,819,927	1.6
1973	2,551,599	1,797,580		754,019	7,573,946	1.8
1974	2,918,882	2,005,262		913,620	8,487,566	2.0
1975	2,615,033	1,863,551		751,482	9,239,048	2.2
1976	2,207,614	1,527,801		679,813	9,918,861	2.3
1977	2,318,202	1,546,412		771,790	10,690,651	2.5
1978	3,608,100	2,395,806	1,212,294		11,902,945	2.8
1979	4,410,901	2,857,993	1,552,908		13,455,853	3.2
1980	4,550,834	2,846,037	1,704,797		15,160,650	3.6
1981	3,994,889	2,468,463	1,526,426		16,687,076	3.9
1982	3,956,324	2,441,209	1,515,115		18,202,191	4.3
1983	4,370,722	2,594,929	1,775,793		19,977,984	4.7
1984	5,326,691	3,117,045	2,209,646		22,187,630	5.2
1985	5,848,947	3,286,276	2,562,671		24,750,301	5.8
1986	7,151,675	4,064,165	3,087,510		27,837,811	6.6
1987	6,410,522	3,632,030	2,778,492		30,616,303	7.2
1988	8,209,462	4,416,487	3,792,975		34,409,278	8.1
1989	7,974,781	4,303,631	3,671,150		38,080,428	9.0
1990	10,715,614	5,637,382	5,078,232		43,158,660	10.2
1991	11,929,187	5,886,551	6,042,636		49,201,296	11.6
1992	12,577,635	5,951,017	6,626,618		55,827,914	13.2
1993	13,648,013	6,331,817	7,316,196		63,144,110	14.9
1994	15,281,895	7,014,666	8,267,229		71,411,339	16.8
1995	12,059,687	5,052,583	7,007,104		78,418,443	18.5
1996	12,445,710	4,970,594	7,475,116		85,893,559	20.3
1997	9,353,552	3,515,247	5,838,305		91,731,864	21.6
1998	10,662,256	3,781,191	6,881,065		98,612,929	23.3
1999	15,609,455	5,671,283	9,938,172		108,551,101	25.6
2000	6,874,007	2,155,474	4,718,533		113,269,634	26.7
2001	7,443,161	2,169,513	5,273,648		118,543,282	28.0
2002	8,326,213	2,324,985	6,001,228		124,544,510	29.4
2003	17,358,297	7,266,061	10,092,236		134,636,746	31.8
2004	15,931,108	4,761,163	11,169,945		145,806,691	34.4

PENNSYLVANIA POWER COMPANY

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	AMOUNT		DEPRECIATED ORIGINAL COST CUMULATIVE AMOUNT (5)		PCT OF COL 4 TOTAL (6)
			(2)	(3)	(4)	(5)	(6)
2005	22,566,483	5,355,911	17,210,572		163,017,263	38.4	
2006	16,799,476	3,934,840	12,864,636		175,881,899	41.5	
2007	21,233,350	5,213,073	16,020,277		191,902,176	45.3	
2008	33,772,400	5,996,484	27,775,916		219,678,092	51.8	
2009	23,094,028	3,920,972	19,173,056		238,851,148	56.3	
2010	25,760,415	3,892,301	21,868,114		260,719,262	61.5	
2011	27,253,853	3,810,371	23,443,482		284,162,744	67.0	
2012	19,004,318	1,782,479	17,221,839		301,384,583	71.1	
2013	32,051,527	2,153,019	29,898,508		331,283,091	78.1	
2014	35,300,482	2,142,073	33,158,409		364,441,500	86.0	
2015	61,116,880	1,579,941	59,536,939		423,978,439	100.0	
TOTAL	602,777,109	178,798,670	423,978,439				

UTILITY PLANT IN SERVICE

PENNSYLVANIA POWER COMPANY

ACCOUNT 303 MISCELLANEOUS INTANGIBLE PLANT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 7-SQUARE						
NET SALVAGE PERCENT.. 0						
1993	99,278.97	99,279	99,279			
1994	446,063.10	446,063	446,063			
1997	8,663.23	8,663	8,663			
2000	2.32	2	2			
2001	3,197.36	3,197	3,197			
2002	33,814.52	33,815	33,815			
2003	3,440,300.85	3,440,301	3,440,301			
2004	946,850.53	946,851	946,851			
2005	214,018.90	214,019	214,019			
2006	338,760.01	338,760	338,760			
2007	1,360,073.16	1,360,073	1,360,073			
2008	203,737.79	203,738	203,738			
2009	571,873.64	531,025	529,486	42,388	0.50	42,388
2010	222,528.47	174,843	174,336	48,192	1.50	32,128
2011	765,152.22	491,886	490,461	274,691	2.50	109,876
2012	322,349.33	161,175	160,708	161,641	3.50	46,183
2013	613,591.02	219,138	218,503	395,088	4.50	87,797
2014	1,367,046.91	292,944	292,095	1,074,952	5.50	195,446
2015	763,973.34	54,571	54,413	709,560	6.50	109,163
	11,721,275.67	9,020,343	9,014,763	2,706,513		622,981
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						4.3 5.31

PENNSYLVANIA POWER COMPANY

ACCOUNT 303.1 MISCELLANEOUS INTANGIBLE PLANT - SMART METER SOFTWARE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 7-SQUARE						
NET SALVAGE PERCENT.. 0						
2014	618,192.34	132,472	82,665	535,527	5.50	97,369
2015	2,213,648.57	158,121	98,670	2,114,979	6.50	325,381
	2,831,840.91	290,593	181,335	2,650,506		422,750
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.3						14.93

PENNSYLVANIA POWER COMPANY

ACCOUNT 352.1 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R4						
NET SALVAGE PERCENT.. 0						
1892	13,916.46	13,916	13,916			
1902	6,694.84	6,695	6,695			
1905	231.68	232	232			
1910	39.90	40	40			
1916	60,448.97	60,449	60,449			
1924	43.93	43	44			
1927	8,724.08	8,493	8,724			
1928	177.84	173	178			
1929	1,767.51	1,712	1,768			
1930	14,505.87	14,016	14,506			
1934	1,584.41	1,511	1,584			
1937	73.90	70	74			
1939	22.85	21	23			
1940	2,686.64	2,515	2,687			
1947	1,236.71	1,110	1,237			
1948	143.92	128	144			
1949	25,332.31	22,574	25,332			
1950	5,551.99	4,909	5,552			
1951	2,081.51	1,826	2,082			
1952	33,072.03	28,773	33,072			
1953	10,213.52	8,809	10,214			
1954	6,627.96	5,666	6,628			
1955	1,809.72	1,533	1,810			
1956	4,607.45	3,866	4,607			
1957	6,127.12	5,054	6,127			
1958	14,126.41	11,534	14,126			
1959	2,837.39	2,293	2,837			
1961	7.14	6	7			
1962	4,535.32	3,519	4,511	24	15.46	2
1963	4,319.60	3,311	4,244	76	15.99	5
1964	5,403.39	4,090	5,243	160	16.53	10
1965	78.02	58	74	4	17.07	
1966	6,356.12	4,688	6,010	346	17.61	20
1967	6,231.00	4,503	5,773	458	18.62	25
1968	4,648.62	3,312	4,246	403	19.17	21
1969	356.16	250	320	36	19.72	2
1970	311.02	214	274	37	20.73	2
1971	9,172.95	6,205	7,954	1,219	21.29	57
1972	5,037.91	3,353	4,298	740	21.86	34
1973	3,867.63	2,515	3,224	644	22.86	28
1974	13,131.54	8,392	10,758	2,374	23.44	101
1975	29,166.31	18,191	23,320	5,846	24.44	239

PENNSYLVANIA POWER COMPANY

ACCOUNT 352.1 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R4						
NET SALVAGE PERCENT.. 0						
1976	35,881.62	21,967	28,160	7,722	25.02	309
1977	3,830.92	2,301	2,950	881	25.60	34
1978	17,998.16	10,529	13,498	4,500	26.60	169
1979	52,736.79	30,218	38,737	14,000	27.20	515
1982	28,737.55	15,211	19,500	9,238	29.79	310
1984	20,936.53	10,485	13,441	7,496	31.40	239
1985	6,426.42	3,117	3,996	2,430	32.39	75
1986	18,049.02	8,465	10,852	7,197	33.40	215
1988	8,340.21	3,670	4,705	3,635	35.00	104
1989	25,492.68	10,809	13,856	11,637	36.00	323
1990	51,854.52	21,291	27,293	24,562	36.61	671
1991	16,292.51	6,426	8,238	8,055	37.61	214
1992	10,310.34	3,901	5,001	5,309	38.61	138
1993	43,358.46	15,704	20,131	23,227	39.61	586
1994	2,144.77	747	958	1,187	40.23	30
2013	104,744.96	4,295	5,506	99,239	58.48	1,697
2015	152.85	1	1	152	60.48	3
	764,597.96	439,705	521,767	242,831		6,178

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 39.3 0.81

PENNSYLVANIA POWER COMPANY

ACCOUNT 352.2 STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R4						
NET SALVAGE PERCENT.. 0						
1982	13,229.30	7,002	8,309	4,920	29.79	165
1984	39,203.31	19,633	23,297	15,906	31.40	507
1985	3,143.26	1,524	1,808	1,335	32.39	41
1986	26,663.57	12,505	14,839	11,825	33.40	354
1988	6,076.93	2,674	3,173	2,904	35.00	83
1989	21,430.98	9,087	10,783	10,648	36.00	296
1990	23,239.46	9,542	11,323	11,916	36.61	325
1991	48,827.78	19,258	22,852	25,976	37.61	691
1992	12,619.20	4,775	5,666	6,953	38.61	180
1993	782.14	283	336	446	39.61	11
	195,215.93	86,283	102,386	92,830		2,653
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 35.0 1.36						

PENNSYLVANIA POWER COMPANY

ACCOUNT 353 STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 58-R2						
NET SALVAGE PERCENT.. 0						
1909	41.23	41	41			
1916	862.00	841	862			
1927	1,733.65	1,642	1,734			
1928	216.04	204	216			
1929	38,721.55	36,507	38,722			
1930	35,159.80	32,769	35,160			
1931	449.00	417	449			
1932	119.88	111	120			
1937	242.76	221	243			
1939	9,738.58	8,791	9,739			
1940	463.62	417	464			
1941	155.42	139	155			
1942	180.32	160	180			
1943	33.60	30	34			
1944	1,085.36	954	1,085			
1945	227.88	199	228			
1946	1,238.53	1,076	1,239			
1948	474.69	407	475			
1949	49,291.90	41,957	49,292			
1950	29,870.55	25,241	29,871			
1951	33,747.50	28,297	33,748			
1952	25,688.62	21,532	25,689			
1953	49,735.60	41,340	49,736			
1954	35,514.59	29,268	35,515			
1955	12,366.39	10,101	12,366			
1956	24,240.10	19,615	24,240			
1957	32,790.95	26,279	32,791			
1958	94,368.17	74,881	94,368			
1959	24,518.34	19,257	24,518			
1960	5,859.49	4,586	5,859			
1961	6,070.94	4,698	6,071			
1962	23,625.78	18,074	23,626			
1963	27,556.99	20,833	27,557			
1964	8,363.66	6,246	8,364			
1965	43,974.57	32,422	43,975			
1966	60,574.02	44,377	60,574			
1967	43,233.66	31,241	43,234			
1968	48,666.90	34,675	48,667			
1969	12,264.53	8,612	12,265			
1970	29,195.12	20,191	29,195			
1971	128,498.28	87,482	128,498			
1972	39,189.73	26,422	39,190			

PENNSYLVANIA POWER COMPANY

ACCOUNT 353 STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 58-R2						
NET SALVAGE PERCENT.. 0						
1973	63,794.82	42,296	63,509	286	21.60	13
1974	72,094.98	46,977	70,538	1,557	22.19	70
1975	222,163.45	142,162	213,463	8,700	22.79	382
1976	140,974.87	88,532	132,935	8,040	23.40	344
1977	83,335.49	51,651	77,556	5,779	23.61	245
1978	374,416.88	227,458	341,539	32,878	24.23	1,357
1979	318,711.15	189,633	284,743	33,968	24.85	1,367
1980	39,863.49	23,209	34,849	5,014	25.48	197
1981	30,851.19	17,668	26,529	4,322	25.74	168
1982	150,010.68	83,916	126,004	24,007	26.38	910
1983	87,184.01	47,602	71,477	15,707	27.02	581
1984	277,584.98	147,786	221,908	55,677	27.67	2,012
1985	198,696.60	103,640	155,621	43,076	27.98	1,540
1986	247,969.63	125,820	188,925	59,045	28.64	2,062
1987	867.95	428	643	225	29.31	8
1988	75,164.52	36,169	54,309	20,856	29.65	703
1989	179,799.81	83,859	125,918	53,882	30.32	1,777
1990	276,889.50	124,988	187,676	89,214	30.99	2,879
1991	539,140.12	236,467	355,067	184,073	31.36	5,870
1992	249,365.88	105,482	158,386	90,980	32.06	2,838
1993	313,176.03	128,246	192,568	120,608	32.45	3,717
1994	158,743.51	62,450	93,772	64,972	33.15	1,960
1995	151,659.94	57,509	86,352	65,308	33.56	1,946
1996	31,707.70	11,500	17,268	14,440	34.26	421
1997	973.99	339	509	465	34.69	13
1999	42,368.02	13,354	20,052	22,316	35.85	622
2000	133,700.87	40,003	60,066	73,635	36.31	2,028
2001	17,252.80	4,853	7,287	9,966	37.05	269
2002	84,278.95	22,300	33,485	50,794	37.52	1,354
2003	412,722.61	102,149	153,381	259,342	38.01	6,823
2006	137,385.34	26,763	40,186	97,199	39.28	2,475
2008	96,983.54	15,275	22,936	74,048	40.12	1,846
2011	38,981.24	3,859	5,794	33,187	40.95	810
2012	137,041.89	10,799	16,216	120,826	40.94	2,951
2013	40,864.62	2,362	3,546	37,319	40.79	915
2014	10,058.15	362	544	9,514	40.17	237
2015	604.29	8	12	592	37.67	16
	6,417,733.78	3,190,427	4,625,924	1,791,810		53,726

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 33.4 0.84

PENNSYLVANIA POWER COMPANY

ACCOUNT 354 TOWERS AND FIXTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 70-R4						
NET SALVAGE PERCENT.. 0						
1947	7,576.09	6,591	7,524	52	10.24	5
	7,576.09	6,591	7,524	52		5
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						10.4 0.07

PENNSYLVANIA POWER COMPANY

ACCOUNT 355 POLES AND FIXTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 62-R1.5						
NET SALVAGE PERCENT.. 0						
1927	336.39	304	332	4	9.54	
1928	532.65	480	525	8	9.59	1
1929	104.15	94	103	1	9.65	
1930	1,832.03	1,629	1,781	51	10.65	5
1932	292.59	259	283	10	10.84	1
1935	217.71	189	207	11	12.09	1
1936	386.63	335	366	21	12.24	2
1937	1,001.98	865	946	56	12.41	5
1938	336.03	289	316	20	12.59	2
1939	2,301.25	1,972	2,156	145	12.79	11
1941	2,624.29	2,229	2,437	187	13.22	14
1942	2,371.71	1,987	2,172	200	14.22	14
1943	2,015.94	1,681	1,838	178	14.45	12
1944	384.68	319	349	36	14.71	2
1945	328.67	271	296	33	14.97	2
1947	7,343.81	5,987	6,545	799	15.53	51
1948	1,501.14	1,216	1,329	172	15.83	11
1949	13,502.91	10,864	11,876	1,627	16.15	101
1950	1,290.58	1,031	1,127	164	16.47	10
1951	7,765.45	6,161	6,735	1,030	16.80	61
1952	11,469.21	9,031	9,873	1,596	17.15	93
1953	7,173.00	5,604	6,126	1,047	17.50	60
1954	11,134.15	8,628	9,432	1,702	17.87	95
1955	13,347.10	10,256	11,212	2,135	18.24	117
1956	3,203.55	2,440	2,667	537	18.62	29
1957	3,919.74	2,958	3,234	686	19.02	36
1958	4,915.16	3,674	4,016	899	19.42	46
1959	13,183.71	9,759	10,668	2,516	19.83	127
1960	8,447.37	6,189	6,766	1,681	20.26	83
1961	3,388.02	2,456	2,685	703	20.69	34
1962	6,488.45	4,652	5,085	1,403	21.13	66
1963	2,612.84	1,852	2,025	588	21.57	27
1964	9,027.63	6,323	6,912	2,116	22.03	96
1965	10,201.17	7,057	7,715	2,486	22.50	110
1966	11,432.55	7,810	8,538	2,895	22.96	126
1967	53,362.49	35,977	39,329	14,033	23.44	599
1968	19,594.84	13,031	14,245	5,350	23.93	224
1969	12,690.74	8,320	9,095	3,596	24.43	147
1970	25,077.24	16,202	17,712	7,365	24.92	296
1971	12,203.82	7,767	8,491	3,713	25.43	146
1972	30,815.42	19,303	21,102	9,713	25.94	374
1973	49,914.18	30,757	33,623	16,291	26.47	615

PENNSYLVANIA POWER COMPANY

ACCOUNT 355 POLES AND FIXTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 62-R1.5						
NET SALVAGE PERCENT.. 0						
1974	5,272.09	3,194	3,492	1,780	26.99	66
1975	4,738.99	2,822	3,085	1,654	27.52	60
1976	3,604.14	2,107	2,303	1,301	28.07	46
1977	3,833.89	2,214	2,420	1,414	28.17	50
1978	4,322.48	2,447	2,675	1,647	28.73	57
1979	17,964.26	9,967	10,896	7,068	29.29	241
1980	3,880.00	2,108	2,304	1,576	29.86	53
1981	3,768.56	2,002	2,189	1,580	30.44	52
1982	34,353.67	17,953	19,626	14,728	30.60	481
1983	19,202.11	9,797	10,710	8,492	31.20	272
1984	14,759.23	7,346	8,030	6,729	31.79	212
1985	22,499.34	10,912	11,929	10,570	32.39	326
1986	178,362.65	84,722	92,616	85,747	32.61	2,629
1987	34,688.28	16,016	17,508	17,180	33.23	517
1988	5,930.24	2,658	2,906	3,024	33.85	89
1989	6,611.18	2,890	3,159	3,452	34.11	101
1990	29,793.98	12,612	13,787	16,007	34.74	461
1991	22,023.41	9,065	9,910	12,113	35.02	346
1992	54,396.65	21,606	23,619	30,778	35.67	863
1993	47,327.44	18,212	19,909	27,418	35.98	762
1994	21,329.22	7,934	8,673	12,656	36.30	349
1995	51,318.70	18,305	20,011	31,308	36.97	847
1996	44,796.40	15,374	16,807	27,989	37.32	750
1998	7,944.05	2,502	2,735	5,209	38.06	137
1999	18,633.00	5,595	6,116	12,517	38.45	326
2000	8,099.94	2,310	2,525	5,575	38.85	144
2003	174,529.01	41,678	45,561	128,968	39.85	3,236
2004	606,425.47	135,294	147,901	458,524	40.05	11,449
2005	8,866.14	1,834	2,005	6,861	40.26	170
2006	19,671.31	3,738	4,086	15,585	40.50	385
2007	23,381.07	4,036	4,412	18,969	40.76	465
2008	152,607.93	23,685	25,892	126,716	40.81	3,105
2009	70,193.39	9,631	10,528	59,665	40.89	1,459
2010	24,525.57	2,928	3,201	21,325	40.58	526
2011	341,053.46	34,242	37,433	303,620	40.34	7,527
2012	14,452.34	1,163	1,271	13,181	39.98	330

PENNSYLVANIA POWER COMPANY

ACCOUNT 355 POLES AND FIXTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 62-R1.5						
NET SALVAGE PERCENT.. 0						
2013	55,110.28	3,307	3,615	51,495	39.17	1,315
2014	2,113.41	81	89	2,024	37.72	54
2015	150,713.11	2,200	2,405	148,308	33.63	4,410
	2,683,169.36	814,695	890,609	1,792,560		48,520
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						36.9 1.81

PENNSYLVANIA POWER COMPANY

ACCOUNT 356 OVERHEAD CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 62-R2						
NET SALVAGE PERCENT.. 0						
1913	46,510.86	45,292	46,511			
1916	13.62	13	14			
1923	3,433.93	3,208	3,434			
1925	217.12	202	217			
1927	12,826.88	11,919	12,827			
1928	2,714.90	2,494	2,715			
1929	6,238.05	5,720	6,238			
1930	3,479.66	3,183	3,480			
1931	521.15	476	521			
1934	197.97	177	198			
1936	78.62	70	79			
1937	1,780.73	1,580	1,781			
1938	393.06	347	393			
1939	3,546.49	3,120	3,546			
1940	1,044.00	914	1,044			
1941	2,800.82	2,441	2,801			
1942	2,761.84	2,395	2,762			
1943	194.46	168	194			
1944	13.66	12	14			
1945	297.54	254	298			
1946	155.69	132	156			
1947	13,059.23	10,914	13,059			
1948	7,524.62	6,247	7,525			
1949	26,594.60	21,930	26,488	107	14.15	8
1950	3,410.53	2,793	3,373	38	14.50	3
1951	9,797.88	7,963	9,618	180	14.87	12
1952	18,578.53	14,982	18,096	483	15.24	32
1953	6,928.41	5,543	6,695	233	15.62	15
1954	23,355.81	18,530	22,381	975	16.02	61
1955	17,037.65	13,400	16,185	853	16.42	52
1956	1,219.79	951	1,149	71	16.84	4
1957	6,394.65	4,938	5,964	431	17.26	25
1958	3,101.71	2,372	2,865	237	17.68	13
1959	9,127.32	6,910	8,346	781	18.13	43
1960	835.08	626	756	79	18.58	4
1961	2,324.50	1,723	2,081	244	19.03	13
1962	7,077.83	5,188	6,266	812	19.49	42
1963	1,187.51	860	1,039	149	19.96	7
1964	9,147.61	6,548	7,909	1,239	20.45	61
1965	10,017.34	7,082	8,554	1,463	20.93	70
1966	9,534.90	6,655	8,038	1,497	21.42	70
1967	28,666.38	19,883	24,015	4,651	21.43	217

PENNSYLVANIA POWER COMPANY

ACCOUNT 356 OVERHEAD CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 62-R2						
NET SALVAGE PERCENT.. 0						
1968	24,736.08	16,919	20,435	4,301	21.94	196
1969	18,327.73	12,357	14,925	3,403	22.47	151
1970	38,696.56	25,706	31,048	7,649	22.99	333
1971	14,785.09	9,672	11,682	3,103	23.52	132
1972	33,435.27	21,526	26,000	7,435	24.07	309
1973	90,837.03	57,518	69,471	21,366	24.62	868
1974	4,809.72	2,994	3,616	1,194	25.17	47
1975	1,926.80	1,178	1,423	504	25.72	20
1976	2,860.23	1,717	2,074	786	26.29	30
1977	920.87	542	655	266	26.86	10
1978	326.28	188	227	99	27.44	4
1979	23,953.48	13,553	16,370	7,583	28.01	271
1980	1,327.31	735	888	439	28.60	15
1981	3,305.59	1,802	2,176	1,130	28.79	39
1982	5,026.30	2,677	3,233	1,793	29.40	61
1983	3,582.06	1,863	2,250	1,332	30.00	44
1984	25,794.87	13,083	15,802	9,993	30.61	326
1985	5,808.49	2,870	3,466	2,342	31.23	75
1986	168,621.45	81,073	97,922	70,699	31.85	2,220
1987	15,819.12	7,394	8,931	6,888	32.48	212
1988	5,557.78	2,537	3,064	2,494	32.74	76
1989	6,336.79	2,805	3,388	2,949	33.38	88
1990	7,541.39	3,231	3,902	3,639	34.02	107
1991	12,943.29	5,359	6,473	6,470	34.67	187
1992	16,084.13	6,463	7,806	8,278	34.98	237
1993	11,451.48	4,432	5,353	6,098	35.64	171
1994	13,219.17	4,918	5,940	7,279	36.30	201
1996	69,897.46	23,989	28,974	40,923	37.32	1,097
1997	1,954.42	640	773	1,181	38.00	31
1998	8,508.98	2,665	3,219	5,290	38.37	138
1999	81.74	24	29	53	39.06	1
2000	7,814.47	2,204	2,662	5,152	39.45	131
2001	9,062.63	2,405	2,905	6,158	40.14	153
2002	46,708.77	11,668	14,093	32,616	40.55	804
2003	31,199.66	7,294	8,810	22,390	40.97	546
2004	270,112.12	58,722	70,926	199,186	41.41	4,810
2005	10,482.32	2,103	2,540	7,942	41.85	190
2006	1,766.43	324	391	1,375	42.31	32
2007	35,906.29	5,953	7,190	28,716	42.78	671
2008	126,307.50	18,757	22,655	103,652	43.01	2,410
2009	146,394.48	19,031	22,986	123,408	43.50	2,837
2010	152,879.53	17,061	20,607	132,273	43.76	3,023

PENNSYLVANIA POWER COMPANY

ACCOUNT 356 OVERHEAD CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 62-R2						
NET SALVAGE PERCENT.. 0						
2011	141,523.20	13,190	15,931	125,592	43.81	2,867
2012	67,420.91	4,976	6,010	61,411	43.90	1,399
2013	131,473.32	7,126	8,607	122,866	43.59	2,819
2014	38,807.79	1,312	1,585	37,223	42.94	867
2015	561,531.11	6,907	8,342	553,189	40.15	13,778
	2,722,010.42	761,618	907,380	1,814,630		45,786
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						39.6 1.68

PENNSYLVANIA POWER COMPANY

ACCOUNT 357 UNDERGROUND CONDUIT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-S2.5						
NET SALVAGE PERCENT.. 0						
1973	64,301.63	51,924	53,533	10,769	10.13	1,063
2000	352.23	132	136	216	25.99	8
	64,653.86	52,056	53,669	10,985		1,071
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						10.3 1.66

PENNSYLVANIA POWER COMPANY

ACCOUNT 358 UNDERGROUND CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 40-S1.5						
NET SALVAGE PERCENT.. 0						
1973	34,544.79	28,189	28,682	5,863	9.58	612
2000	490.91	208	212	279	21.13	13
2009	1,034.11	198	201	833	27.51	30
2015	1.51			2	32.72	
	36,071.32	28,595	29,095	6,976		655
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						10.7 1.82

PENNSYLVANIA POWER COMPANY

ACCOUNT 359 ROADS AND TRAILS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S2.5						
NET SALVAGE PERCENT.. 0						
1966	2,500.63	1,980	2,159	342	13.00	26
1976	3,823.81	2,643	2,881	943	17.65	53
	6,324.44	4,623	5,040	1,284		79
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						16.3 1.25

PENNSYLVANIA POWER COMPANY

ACCOUNT 361.1 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R3						
NET SALVAGE PERCENT.. 0						
1910	59.89	59	60			
1924	65.89	63	66			
1927	1,338.81	1,268	1,339			
1928	266.76	252	267			
1929	3,587.35	3,382	3,587			
1930	3,029.31	2,823	3,029			
1934	1,216.67	1,121	1,217			
1938	223.85	203	224			
1939	34.27	31	34			
1944	522.08	459	522			
1947	1,855.08	1,601	1,855			
1948	215.89	185	216			
1949	6,217.69	5,292	6,218			
1950	6,777.10	5,727	6,777			
1951	4,280.02	3,589	4,280			
1952	16,254.82	13,521	16,255			
1953	13,507.19	11,143	13,507			
1954	9,941.99	8,133	9,942			
1955	2,714.59	2,201	2,715			
1956	7,310.14	5,872	7,310			
1957	9,190.64	7,312	9,191			
1958	13,057.47	10,287	13,057			
1959	4,256.10	3,318	4,256			
1961	10.71	8	11			
1962	6,803.00	5,095	6,722	81	17.93	5
1963	6,479.39	4,796	6,327	152	18.43	8
1964	781.06	571	753	28	18.92	1
1965	117.04	85	112	5	19.43	
1966	26,654.95	19,000	25,065	1,590	19.94	80
1967	4,029.96	2,834	3,739	291	20.47	14
1968	6,972.93	4,836	6,380	593	20.99	28
1969	3,078.15	2,090	2,757	321	21.99	15
1970	466.52	312	412	55	22.53	2
1971	8,281.18	5,454	7,195	1,086	23.07	47
1972	7,556.88	4,898	6,462	1,095	23.61	46
1973	5,801.42	3,698	4,879	922	24.17	38
1974	21,033.15	13,093	17,273	3,760	25.17	149
1975	14,042.40	8,588	11,330	2,712	25.72	105
1976	11,138.09	6,687	8,822	2,316	26.29	88
1977	5,672.38	3,341	4,408	1,264	26.86	47
1978	4,503.96	2,601	3,431	1,073	27.44	39
1979	27,845.59	15,652	20,649	7,197	28.44	253

PENNSYLVANIA POWER COMPANY

ACCOUNT 361.1 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R3						
NET SALVAGE PERCENT.. 0						
1982	5,554.61	2,922	3,855	1,700	30.19	56
1984	13,214.70	6,577	8,677	4,538	31.79	143
1985	4,676.60	2,268	2,992	1,685	32.39	52
1986	35,825.65	16,802	22,166	13,660	33.40	409
1988	12,435.94	5,507	7,265	5,171	34.61	149
1989	36,605.13	15,715	20,732	15,873	35.23	451
1990	44,790.15	18,503	24,410	20,380	36.23	563
1991	20,285.00	8,102	10,688	9,597	36.85	260
1992	10,871.44	4,190	5,528	5,343	37.48	143
1993	139,362.39	51,425	67,841	71,521	38.48	1,859
1994	23,380.46	8,295	10,943	12,437	39.10	318
1995	857.36	290	383	474	40.11	12
1996	64,611.47	20,915	27,591	37,020	40.74	909
2007	224,734.80	33,036	43,581	181,154	49.31	3,674
2008	91,872.95	11,925	15,732	76,141	50.30	1,514
2009	143,714.14	16,254	21,442	122,272	50.97	2,399
2011	10,268.96	813	1,073	9,196	52.32	176
2014	24,654.63	661	872	23,783	54.37	437
2015	104,070.79	947	1,249	102,822	54.45	1,888
	1,278,979.53	416,628	539,671	739,309		16,377

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 45.1 1.28

PENNSYLVANIA POWER COMPANY

ACCOUNT 361.2 STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R3						
NET SALVAGE PERCENT.. 0						
1982	10,423.29	5,483	7,102	3,321	30.19	110
1984	22,196.95	11,047	14,310	7,887	31.79	248
1985	4,714.89	2,287	2,962	1,753	32.39	54
1986	27,260.71	12,785	16,561	10,700	33.40	320
1988	9,123.84	4,040	5,233	3,891	34.61	112
1989	32,176.26	13,813	17,892	14,284	35.23	405
1990	52,686.14	21,765	28,193	24,493	36.23	676
1991	55,883.01	22,320	28,912	26,971	36.85	732
1992	17,590.91	6,780	8,782	8,809	37.48	235
1993	43,941.89	16,215	21,004	22,938	38.48	596
1994	22,576.32	8,010	10,376	12,200	39.10	312
2005	137,521.89	24,836	32,171	105,351	47.64	2,211
2007	12,535.66	1,843	2,387	10,149	49.31	206
2012	6.01			6	52.99	
2015	10.94			11	54.45	
	448,648.71	151,224	195,885	252,764		6,217
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						40.7 1.39

PENNSYLVANIA POWER COMPANY

ACCOUNT 362 STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R0.5						
NET SALVAGE PERCENT.. 0						
1916	1,654.35	1,646	1,442	212	0.50	212
1923	600.88	578	506	95	3.65	26
1924	210.00	202	177	33	3.73	9
1926	566.38	537	471	95	4.84	20
1927	4,454.57	4,218	3,696	759	4.95	153
1928	232.29	217	190	42	5.96	7
1929	41,262.77	38,548	33,778	7,485	6.09	1,229
1930	40,746.93	37,976	33,276	7,471	6.24	1,197
1931	38.37	36	32	6	6.41	1
1933	58.02	53	46	12	7.59	2
1936	504.68	453	397	108	8.99	12
1937	15.10	14	12	3	9.22	
1938	112.50	100	88	24	9.46	3
1939	5,547.88	4,923	4,314	1,234	9.71	127
1940	15,136.84	13,372	11,717	3,420	9.97	343
1941	788.51	693	607	182	10.25	18
1942	418.61	366	321	98	10.54	9
1943	162.13	141	124	38	10.83	4
1944	4,784.97	4,140	3,628	1,157	11.14	104
1945	954.48	814	713	241	12.15	20
1946	2,353.97	1,996	1,749	605	12.47	49
1948	45,287.89	37,906	33,215	12,073	13.15	918
1949	32,471.55	26,990	23,650	8,822	13.50	653
1950	45,357.81	37,434	32,801	12,557	13.87	905
1951	11,913.77	9,836	8,619	3,295	13.62	242
1952	89,218.74	73,088	64,043	25,176	14.02	1,796
1953	177,496.09	144,216	126,369	51,127	14.42	3,546
1954	83,586.74	67,337	59,004	24,583	14.84	1,657
1955	24,328.89	19,429	17,025	7,304	15.26	479
1956	46,140.41	36,516	31,997	14,143	15.68	902
1957	109,171.01	85,579	74,988	34,183	16.13	2,119
1958	146,151.81	113,443	99,404	46,748	16.58	2,820
1959	23,075.26	17,860	15,650	7,425	16.50	450
1960	17,824.42	13,652	11,963	5,861	16.96	346
1961	37,093.95	28,102	24,624	12,470	17.44	715
1962	54,041.26	40,477	35,468	18,573	17.93	1,036
1963	23,687.78	17,534	15,364	8,324	18.43	452
1964	22,656.67	16,684	14,619	8,038	18.43	436
1965	108,671.22	79,026	69,246	39,425	18.94	2,082
1966	158,097.59	113,482	99,438	58,660	19.46	3,014
1967	355,281.85	253,316	221,968	133,314	19.52	6,830
1968	209,762.84	147,463	129,214	80,549	20.07	4,013

PENNSYLVANIA POWER COMPANY

ACCOUNT 362 STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R0.5						
NET SALVAGE PERCENT.. 0						
1969	101,045.07	70,479	61,757	39,288	20.17	1,948
1970	108,301.41	74,403	65,195	43,106	20.73	2,079
1971	153,093.79	103,553	90,738	62,356	21.29	2,929
1972	171,969.97	115,203	100,946	71,024	21.44	3,313
1973	228,555.48	150,572	131,938	96,617	22.01	4,390
1974	494,307.47	322,091	282,232	212,075	22.19	9,557
1975	166,601.07	107,291	94,014	72,587	22.39	3,242
1976	142,555.91	90,095	78,946	63,610	23.00	2,766
1977	308,678.73	192,523	168,698	139,981	23.23	6,026
1978	452,066.76	278,021	243,615	208,452	23.48	8,878
1979	772,452.53	465,171	407,605	364,848	24.11	15,133
1980	386,710.64	229,242	200,873	185,838	24.38	7,623
1981	109,186.08	63,655	55,778	53,408	24.67	2,165
1982	224,107.36	128,369	112,483	111,624	24.98	4,469
1983	14,776.60	8,307	7,279	7,498	25.31	296
1984	541,596.59	298,528	261,585	280,012	25.65	10,917
1985	231,058.74	124,726	109,291	121,768	26.00	4,683
1986	584,405.24	308,566	270,380	314,025	26.37	11,908
1987	263,379.47	135,851	119,039	144,340	26.75	5,396
1988	239,903.21	120,719	105,780	134,123	27.15	4,940
1989	788,618.99	388,710	340,606	448,013	27.26	16,435
1990	939,549.21	450,420	394,680	544,869	27.69	19,677
1991	1,979,184.37	926,258	811,632	1,167,552	27.85	41,923
1992	1,664,075.53	754,825	661,414	1,002,662	28.31	35,417
1993	1,305,930.76	575,915	504,644	801,287	28.52	28,096
1994	1,644,206.94	703,392	616,346	1,027,861	28.75	35,752
1995	548,766.36	227,244	199,122	349,644	29.00	12,057
1996	572,238.78	228,781	200,469	371,770	29.28	12,697
1997	425,963.62	163,911	143,627	282,337	29.58	9,545
1998	340,896.85	126,473	110,822	230,075	29.67	7,754
1999	665,636.77	237,233	207,875	457,762	29.80	15,361
2000	433,698.12	147,891	129,589	304,109	29.95	10,154
2001	1,232,993.86	400,476	350,916	882,078	30.14	29,266
2002	824,108.78	254,814	223,280	600,829	30.17	19,915
2003	317,367.02	92,830	81,342	236,025	30.24	7,805
2004	720,627.82	198,893	174,280	546,348	30.17	18,109
2005	4,720,747.79	1,219,369	1,068,469	3,652,279	30.15	121,137
2006	769,746.95	185,047	162,147	607,600	30.02	20,240
2007	3,200,570.05	707,326	619,793	2,580,777	29.96	86,141
2008	4,558,549.05	919,915	806,074	3,752,475	29.67	126,474
2009	3,051,552.39	553,552	485,049	2,566,503	29.34	87,475
2010	510,931.86	81,494	71,409	439,523	28.98	15,166

PENNSYLVANIA POWER COMPANY

ACCOUNT 362 STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R0.5						
NET SALVAGE PERCENT.. 0						
2011	777,577.69	106,684	93,482	684,096	28.29	24,182
2012	914,814.71	103,374	90,581	824,234	27.46	30,016
2013	1,403,817.66	121,851	106,771	1,297,047	26.32	49,280
2014	1,168,285.67	67,644	59,273	1,109,013	24.41	45,433
2015	7,622,869.37	184,473	161,644	7,461,225	20.12	370,836
	50,740,000.87	15,006,553	13,149,461	37,590,540		1,447,957
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						26.0 2.85

PENNSYLVANIA POWER COMPANY

ACCOUNT 364 POLES, TOWERS AND FIXTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
1927	106.42	103	98	8	3.25	2
1928	768.91	733	699	70	4.24	17
1929	64.63	61	58	7	4.41	2
1930	17.51	17	16	2	4.59	
1931	6.43	6	6			
1932	226.78	214	204	23	4.99	5
1933	171.57	161	154	18	5.22	3
1934	309.01	290	277	32	5.46	6
1935	220.54	206	197	24	5.71	4
1936	1,664.46	1,548	1,477	187	5.97	31
1937	24,987.20	23,146	22,087	2,900	6.25	464
1938	4,756.12	4,386	4,185	571	6.54	87
1939	7,213.04	6,622	6,319	894	6.83	131
1940	5,365.97	4,902	4,678	688	7.14	96
1941	6,758.04	6,142	5,861	897	7.47	120
1942	4,397.18	3,975	3,793	604	7.80	77
1943	3,142.54	2,825	2,696	447	8.15	55
1944	3,469.93	3,101	2,959	511	8.50	60
1945	3,824.51	3,424	3,267	558	8.24	68
1946	6,880.15	6,121	5,841	1,039	8.62	121
1947	14,582.29	12,885	12,295	2,287	9.02	254
1948	30,316.54	26,603	25,385	4,932	9.42	524
1949	42,904.27	37,378	35,667	7,237	9.83	736
1950	44,922.63	38,840	37,062	7,861	10.26	766
1951	69,288.83	59,886	57,145	12,144	10.13	1,199
1952	58,803.47	50,406	48,099	10,704	10.58	1,012
1953	107,346.74	91,245	87,069	20,278	11.03	1,838
1954	108,706.72	91,596	87,404	21,303	11.49	1,854
1955	98,757.22	82,452	78,678	20,079	11.96	1,679
1956	143,706.40	119,707	114,228	29,478	11.93	2,471
1957	44,028.58	36,315	34,653	9,376	12.43	754
1958	135,479.52	110,619	105,556	29,924	12.92	2,316
1959	222,353.51	179,662	171,439	50,915	13.43	3,791
1960	228,580.27	183,961	175,541	53,039	13.46	3,940
1961	236,652.16	188,304	179,685	56,967	13.99	4,072
1962	266,950.69	209,930	200,321	66,630	14.53	4,586
1963	256,588.66	199,369	190,244	66,345	15.07	4,402
1964	319,411.16	246,745	235,451	83,960	15.17	5,535
1965	354,041.92	269,992	257,634	96,408	15.72	6,133
1966	470,383.37	353,916	337,717	132,666	16.29	8,144
1967	441,501.17	329,757	314,664	126,837	16.44	7,715
1968	432,155.51	318,153	303,591	128,565	17.02	7,554

PENNSYLVANIA POWER COMPANY

ACCOUNT 364 POLES, TOWERS AND FIXTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
1969	488,155.05	354,108	337,900	150,255	17.60	8,537
1970	448,964.49	320,740	306,060	142,904	18.19	7,856
1971	569,744.58	403,151	384,699	185,046	18.39	10,062
1972	571,845.53	398,004	379,787	192,059	19.00	10,108
1973	525,623.59	359,632	343,171	182,453	19.61	9,304
1974	694,757.66	469,934	448,425	246,333	19.85	12,410
1975	714,108.03	474,311	452,601	261,507	20.48	12,769
1976	592,928.68	386,471	368,782	224,147	21.10	10,623
1977	532,617.16	342,473	326,798	205,819	21.38	9,627
1978	812,396.45	511,810	488,384	324,012	22.02	14,714
1979	916,634.91	565,380	539,502	377,133	22.67	16,636
1980	1,237,095.14	750,917	716,547	520,548	22.98	22,652
1981	1,510,775.71	896,494	855,461	655,315	23.64	27,721
1982	1,291,450.25	748,525	714,265	577,185	24.30	23,752
1983	1,878,493.79	1,068,487	1,019,582	858,912	24.64	34,858
1984	1,400,407.40	776,386	740,850	659,557	25.32	26,049
1985	1,990,407.02	1,080,592	1,031,133	959,274	25.68	37,355
1986	1,739,002.48	918,193	876,167	862,835	26.37	32,720
1987	1,955,669.01	1,008,734	962,564	993,105	26.75	37,125
1988	2,254,365.19	1,128,310	1,076,666	1,177,699	27.45	42,903
1989	1,958,400.02	954,916	911,209	1,047,191	27.85	37,601
1990	2,196,611.47	1,036,361	988,926	1,207,685	28.55	42,301
1991	2,409,477.28	1,104,022	1,053,490	1,355,987	28.97	46,807
1992	2,505,717.64	1,107,026	1,056,357	1,449,361	29.69	48,816
1993	3,047,249.87	1,302,699	1,243,074	1,804,176	30.13	59,880
1994	3,132,584.86	1,286,239	1,227,367	1,905,218	30.86	61,737
1995	2,311,114.27	914,277	872,430	1,438,684	31.32	45,935
1996	2,622,373.43	997,026	951,391	1,670,982	31.78	52,580
1997	2,055,646.95	745,378	711,262	1,344,385	32.52	41,340
1998	2,867,719.65	993,665	948,184	1,919,536	33.01	58,150
1999	2,097,313.55	692,113	660,434	1,436,880	33.50	42,892
2000	2,091,628.45	654,889	624,914	1,466,714	34.00	43,139
2001	1,895,430.60	560,668	535,006	1,360,425	34.52	39,410
2002	2,137,725.18	594,501	567,290	1,570,435	35.04	44,818
2003	2,931,266.18	762,129	727,246	2,204,020	35.58	61,945
2004	1,983,977.57	479,131	457,201	1,526,777	36.12	42,270
2005	2,971,728.44	661,507	631,229	2,340,499	36.67	63,826
2006	2,571,243.50	525,048	501,016	2,070,228	37.01	55,937
2007	2,196,634.23	405,059	386,519	1,810,115	37.59	48,154
2008	3,314,526.50	546,897	521,865	2,792,662	37.95	73,588
2009	3,205,096.64	464,739	443,468	2,761,629	38.34	72,030
2010	3,805,968.63	474,985	453,245	3,352,724	38.56	86,948

PENNSYLVANIA POWER COMPANY

ACCOUNT 364 POLES, TOWERS AND FIXTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
2011	3,747,690.10	389,760	371,920	3,375,770	38.79	87,027
2012	3,200,055.99	264,325	252,227	2,947,829	38.87	75,838
2013	2,985,000.78	180,593	172,327	2,812,674	38.82	72,454
2014	5,550,901.17	209,824	200,220	5,350,681	38.18	140,144
2015	4,870,543.50	67,214	64,138	4,806,406	35.86	134,033
	102,990,881.14	34,643,347	33,057,699	69,933,182		2,160,005
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						32.4 2.10

PENNSYLVANIA POWER COMPANY

ACCOUNT 365 OVERHEAD CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R1						
NET SALVAGE PERCENT.. 0						
1926	2,438.47	2,204	1,859	579	9.50	61
1927	2,003.82	1,809	1,526	478	9.54	50
1928	8,254.97	7,439	6,276	1,979	9.59	206
1929	8,909.16	7,938	6,697	2,212	10.58	209
1930	17,263.80	15,351	12,951	4,313	10.65	405
1931	10,960.70	9,724	8,203	2,758	10.74	257
1932	4,316.67	3,785	3,193	1,124	11.73	96
1933	3,924.99	3,432	2,895	1,030	11.84	87
1934	5,962.59	5,199	4,386	1,577	11.96	132
1935	8,673.12	7,540	6,361	2,312	12.09	191
1936	12,710.33	11,015	9,293	3,417	12.24	279
1937	35,542.05	30,410	25,655	9,887	13.25	746
1938	33,508.57	28,566	24,099	9,410	13.41	702
1939	22,811.49	19,372	16,343	6,468	13.59	476
1940	30,812.46	26,055	21,981	8,831	13.79	640
1941	33,330.97	28,058	23,671	9,660	14.00	690
1942	8,371.85	6,954	5,867	2,505	14.99	167
1943	5,923.46	4,896	4,130	1,793	15.22	118
1944	8,426.59	6,928	5,845	2,582	15.46	167
1945	24,401.66	19,956	16,835	7,567	15.71	482
1946	37,241.05	30,284	25,548	11,693	15.97	732
1947	79,925.24	64,604	54,502	25,423	16.25	1,564
1948	109,098.31	87,628	73,926	35,172	16.54	2,126
1949	116,480.12	92,182	77,767	38,713	17.53	2,208
1950	161,449.00	126,899	107,056	54,393	17.83	3,051
1951	162,269.52	126,635	106,833	55,437	18.15	3,054
1952	161,110.57	124,812	105,295	55,816	18.47	3,022
1953	195,651.33	150,417	126,896	68,755	18.80	3,657
1954	211,846.43	161,554	136,292	75,554	19.15	3,945
1955	174,980.28	132,320	111,629	63,351	19.50	3,249
1956	187,404.99	140,498	118,528	68,877	19.87	3,466
1957	285,711.04	212,283	179,088	106,623	20.24	5,268
1958	255,066.01	187,729	158,374	96,692	20.62	4,689
1959	295,552.27	215,398	181,716	113,836	21.02	5,416
1960	270,890.39	195,447	164,885	106,005	21.42	4,949
1961	287,085.13	204,979	172,926	114,159	21.83	5,229
1962	446,832.52	315,553	266,210	180,623	22.26	8,114
1963	305,020.06	212,965	179,664	125,356	22.69	5,525
1964	317,296.68	218,966	184,726	132,571	23.13	5,732
1965	345,537.75	235,588	198,749	146,789	23.57	6,228
1966	427,603.58	287,863	242,850	184,754	24.03	7,688
1967	361,604.88	240,250	202,682	158,923	24.50	6,487

PENNSYLVANIA POWER COMPANY

ACCOUNT 365 OVERHEAD CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R1						
NET SALVAGE PERCENT.. 0						
1968	405,212.16	265,617	224,082	181,130	24.96	7,257
1969	405,987.46	262,430	221,394	184,593	25.44	7,256
1970	343,611.18	220,461	185,987	157,624	25.42	6,201
1971	499,684.29	315,751	266,377	233,307	25.92	9,001
1972	421,702.76	262,299	221,283	200,420	26.43	7,583
1973	495,708.74	303,374	255,935	239,774	26.94	8,900
1974	396,561.33	238,651	201,333	195,228	27.46	7,110
1975	338,279.57	201,412	169,917	168,363	27.52	6,118
1976	307,114.08	179,539	151,464	155,650	28.07	5,545
1977	320,312.41	183,731	155,001	165,311	28.62	5,776
1978	544,720.53	306,405	258,492	286,229	29.17	9,812
1979	432,412.41	239,902	202,388	230,024	29.29	7,853
1980	692,887.34	376,376	317,522	375,365	29.86	12,571
1981	560,677.34	297,888	251,307	309,370	30.44	10,163
1982	406,844.20	212,617	179,370	227,474	30.60	7,434
1983	578,811.91	295,310	249,132	329,680	31.20	10,567
1984	705,710.59	353,420	298,156	407,555	31.40	12,979
1985	1,190,729.71	581,076	490,213	700,517	32.00	21,891
1986	780,619.87	373,058	314,723	465,897	32.23	14,455
1987	701,870.63	326,089	275,098	426,773	32.85	12,992
1988	1,243,839.57	564,454	476,190	767,650	33.10	23,192
1989	971,768.78	430,105	362,849	608,920	33.38	18,242
1990	1,331,489.73	570,410	481,215	850,275	34.02	24,993
1991	1,842,394.72	767,357	647,365	1,195,030	34.32	34,820
1992	1,734,794.94	701,204	591,557	1,143,238	34.64	33,003
1993	1,819,185.65	712,211	600,843	1,218,343	34.97	34,840
1994	1,734,897.58	656,485	553,830	1,181,068	35.32	33,439
1995	2,864,629.94	1,045,303	881,849	1,982,781	35.68	55,571
1996	2,681,474.42	946,560	798,546	1,882,928	35.75	52,669
1997	1,915,107.28	648,455	547,056	1,368,051	36.14	37,854
1998	1,684,604.75	545,475	460,179	1,224,426	36.55	33,500
1999	1,774,512.13	550,454	464,379	1,310,133	36.69	35,708
2000	1,561,193.13	462,113	389,852	1,171,341	36.86	31,778
2001	1,324,679.89	372,632	314,364	1,010,316	37.05	27,269
2002	2,018,591.45	536,945	452,983	1,565,608	37.26	42,018
2003	2,714,487.68	678,622	572,506	2,141,982	37.50	57,120
2004	3,171,219.77	743,968	627,634	2,543,586	37.52	67,793
2005	4,749,076.55	1,037,198	875,011	3,874,066	37.58	103,089
2006	3,817,039.71	768,752	648,542	3,168,498	37.67	84,112
2007	4,605,315.61	849,220	716,427	3,888,889	37.59	103,455
2008	4,834,715.36	808,364	681,960	4,152,755	37.35	111,185
2009	4,605,593.92	685,312	578,150	4,027,444	37.17	108,352

PENNSYLVANIA POWER COMPANY

ACCOUNT 365 OVERHEAD CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R1						
NET SALVAGE PERCENT.. 0						
2010	4,735,418.67	614,657	518,543	4,216,876	36.87	114,371
2011	6,032,397.51	664,770	560,820	5,471,578	36.32	150,649
2012	5,427,040.33	486,263	410,226	5,016,814	35.56	141,080
2013	4,947,164.13	333,934	281,717	4,665,447	34.54	135,074
2014	5,970,413.70	262,698	221,620	5,748,794	32.63	176,181
2015	7,039,731.05	123,195	103,931	6,935,800	28.07	247,089
	105,166,441.33	27,374,007	23,093,526	82,072,915		2,411,470
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						34.0 2.29

PENNSYLVANIA POWER COMPANY

ACCOUNT 365.1 OVERHEAD CONDUCTORS AND DEVICES - CLEARING AND GRADING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R1						
NET SALVAGE PERCENT.. 0						
2004	149,196.07	35,001	32,831	116,365	37.52	3,101
2007	1,124,793.26	207,412	194,551	930,242	37.59	24,747
2008	11,514,810.25	1,925,276	1,805,900	9,708,910	37.35	259,944
2009	2,680,789.05	398,901	374,167	2,306,622	37.17	62,056
2010	6,827,436.70	886,201	831,253	5,996,184	36.87	162,630
2011	3,990,494.35	439,752	412,485	3,578,009	36.32	98,513
2012	434,935.88	38,970	36,554	398,382	35.56	11,203
2013	11,750,658.82	793,169	743,989	11,006,670	34.54	318,664
2014	5,630,964.89	247,762	232,399	5,398,566	32.63	165,448
2015	4,487,367.85	78,529	73,660	4,413,708	28.07	157,239
	48,591,447.12	5,050,973	4,737,789	43,853,658		1,263,545
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						34.7 2.60

PENNSYLVANIA POWER COMPANY

ACCOUNT 366 UNDERGROUND CONDUIT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R2.5						
NET SALVAGE PERCENT.. 0						
1924	1,036.41	986	933	103	4.65	22
1927	16,100.83	15,104	14,292	1,809	5.84	310
1930	1,136.36	1,059	1,002	134	6.24	21
1938	109.19	99	94	15	7.97	2
1940	16,131.24	14,492	13,713	2,418	8.54	283
1942	415.69	373	353	63	8.47	7
1948	397.01	343	325	72	10.62	7
1949	438.31	376	356	82	11.02	7
1955	30.90	25	24	7	13.03	1
1956	1,238.82	1,010	956	283	13.49	21
1957	14,818.81	11,963	11,320	3,499	13.96	251
1958	2,441.38	1,965	1,859	582	13.93	42
1959	829.25	661	625	204	14.43	14
1960	20.54	16	15	6	14.92	
1965	24,788.19	18,403	17,414	7,374	17.52	421
1966	8,399.45	6,153	5,822	2,577	18.07	143
1967	25,117.72	18,150	17,174	7,944	18.62	427
1968	12,362.77	8,808	8,335	4,028	19.17	210
1969	12,224.88	8,641	8,177	4,048	19.29	210
1970	99,788.62	69,473	65,739	34,050	19.86	1,715
1971	70,623.29	48,398	45,797	24,826	20.44	1,215
1972	21,049.70	14,192	13,429	7,621	21.02	363
1973	56,756.89	37,630	35,607	21,150	21.60	979
1974	179,091.75	116,696	110,423	68,669	22.19	3,095
1975	82,142.31	52,563	49,738	32,404	22.79	1,422
1976	27,813.80	17,467	16,528	11,286	23.40	482
1977	6,918.58	4,262	4,033	2,886	24.00	120
1978	34,428.80	20,788	19,671	14,758	24.61	600
1979	39,239.12	23,202	21,955	17,284	25.23	685
1980	18,057.80	10,448	9,886	8,172	25.85	316
1981	27,579.60	15,605	14,766	12,814	26.48	484
1982	30,834.46	17,045	16,129	14,705	27.10	543
1983	22,743.49	12,270	11,610	11,133	27.74	401
1984	17,054.41	8,971	8,489	8,565	28.38	302
1985	21,232.54	10,880	10,295	10,938	29.02	377
1986	52,525.87	26,189	24,781	27,745	29.67	935
1987	22,291.97	10,800	10,219	12,073	30.32	398
1988	48,428.09	22,771	21,547	26,881	30.98	868
1989	47,218.87	21,522	20,365	26,854	31.64	849
1990	58,646.48	25,875	24,484	34,162	32.30	1,058
1991	57,778.57	24,631	23,307	34,472	32.97	1,046
1992	82,970.88	34,317	32,472	50,499	33.32	1,516

PENNSYLVANIA POWER COMPANY

ACCOUNT 366 UNDERGROUND CONDUIT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R2.5						
NET SALVAGE PERCENT.. 0						
1993	82,307.06	32,775	31,013	51,294	34.00	1,509
1994	520,363.19	199,143	188,439	331,924	34.68	9,571
1995	615,710.02	225,966	213,821	401,889	35.36	11,366
1996	849,360.85	298,126	282,102	567,259	36.06	15,731
1997	486,835.39	162,992	154,231	332,604	36.75	9,050
1998	502,488.91	160,043	151,441	351,048	37.45	9,374
1999	457,524.73	138,172	130,745	326,780	38.14	8,568
2000	159,814.66	45,579	43,129	116,686	38.85	3,004
2001	147,881.34	39,884	37,740	110,141	39.26	2,805
2002	131,402.13	33,166	31,383	100,019	39.98	2,502
2003	291,188.62	68,429	64,751	226,438	40.69	5,565
2004	192,639.19	41,880	39,629	153,010	41.41	3,695
2005	178,586.66	35,824	33,899	144,688	41.85	3,457
2006	199,417.07	36,374	34,419	164,998	42.58	3,875
2007	103,104.20	17,002	16,088	87,016	43.05	2,021
2008	177,145.25	25,899	24,507	152,638	43.78	3,486
2009	86,254.29	11,041	10,448	75,806	44.26	1,713
2010	83,169.59	9,099	8,610	74,560	44.75	1,666
2011	196,798.78	17,889	16,927	179,872	45.00	3,997
2012	119,448.00	8,529	8,071	111,377	45.52	2,447
2013	418,961.92	21,786	20,615	398,347	45.58	8,740
2014	187,660.60	6,005	5,682	181,979	45.45	4,004
2015	135,073.11	1,526	1,444	133,629	43.75	3,054
	7,586,389.20	2,391,751	2,263,193	5,323,196		143,368
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						37.1 1.89

PENNSYLVANIA POWER COMPANY

ACCOUNT 367 UNDERGROUND CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R2.5						
NET SALVAGE PERCENT.. 0						
1967	15,072.57	12,209	12,808	2,265	11.38	199
1968	35,452.48	28,291	29,678	5,774	12.02	480
1969	22,839.23	18,054	18,939	3,900	12.32	317
1970	140,029.86	108,943	114,285	25,745	12.98	1,983
1971	173,951.84	133,908	140,474	33,478	13.31	2,515
1972	254,890.96	194,023	203,537	51,354	13.65	3,762
1973	220,810.65	165,166	173,265	47,546	14.32	3,320
1974	183,481.88	135,538	142,184	41,298	14.68	2,813
1975	304,363.28	220,663	231,483	72,880	15.36	4,745
1976	169,042.28	120,865	126,791	42,251	15.75	2,683
1977	89,731.89	62,875	65,958	23,774	16.45	1,445
1978	168,051.38	115,955	121,641	46,410	16.85	2,754
1979	278,807.69	188,251	197,482	81,326	17.56	4,631
1980	326,758.49	216,902	227,537	99,221	17.98	5,518
1981	434,863.50	282,052	295,882	138,982	18.69	7,436
1982	254,532.11	162,010	169,954	84,578	19.13	4,421
1983	329,437.47	204,515	214,543	114,894	19.85	5,788
1984	469,612.35	285,524	299,524	170,088	20.31	8,375
1985	407,796.57	241,293	253,124	154,673	21.05	7,348
1986	765,972.61	442,885	464,601	301,372	21.52	14,004
1987	724,157.05	406,542	426,476	297,681	22.26	13,373
1988	1,305,400.23	714,315	749,340	556,060	22.75	24,442
1989	878,191.59	465,442	488,264	389,928	23.50	16,593
1990	1,239,623.93	638,530	669,839	569,785	24.00	23,741
1991	1,247,658.60	620,585	651,014	596,645	24.76	24,097
1992	1,624,523.91	782,696	821,074	803,450	25.28	31,782
1993	2,089,669.54	968,562	1,016,053	1,073,617	26.04	41,230
1994	3,523,503.39	1,575,711	1,652,973	1,870,530	26.58	70,374
1995	1,214,962.01	520,490	546,011	668,951	27.35	24,459
1996	1,415,194.34	582,211	610,759	804,435	27.90	28,833
1997	2,088,740.40	819,204	859,372	1,229,368	28.67	42,880
1998	2,908,860.86	1,089,368	1,142,783	1,766,078	29.23	60,420
1999	5,940,886.25	2,107,826	2,211,179	3,729,707	30.01	124,282
2000	1,341,531.70	451,291	473,419	868,113	30.58	28,388
2001	1,257,140.86	399,268	418,845	838,296	31.16	26,903
2002	1,528,235.45	453,886	476,141	1,052,094	31.95	32,929
2003	1,885,728.03	523,290	548,948	1,336,780	32.55	41,069
2004	1,568,893.16	404,147	423,964	1,144,929	33.14	34,548
2005	2,192,132.18	520,193	545,700	1,646,432	33.75	48,783
2006	1,824,526.24	393,368	412,656	1,411,870	34.56	40,853
2007	1,076,633.11	209,513	219,786	856,847	35.17	24,363
2008	1,052,643.58	183,160	192,141	860,503	35.60	24,171

PENNSYLVANIA POWER COMPANY

ACCOUNT 367 UNDERGROUND CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R2.5						
NET SALVAGE PERCENT.. 0						
2009	1,609,230.14	244,764	256,765	1,352,465	36.24	37,320
2010	1,059,715.62	137,551	144,296	915,420	36.87	24,828
2011	2,617,006.46	281,590	295,397	2,321,609	37.34	62,175
2012	2,785,273.25	236,748	248,356	2,536,917	37.65	67,382
2013	2,851,543.65	176,225	184,866	2,666,678	37.98	70,213
2014	2,468,574.74	94,053	98,665	2,369,910	37.87	62,580
2015	3,541,684.61	47,459	49,786	3,491,899	36.68	95,199
	61,907,363.97	19,387,910	20,338,558	41,568,806		1,332,747
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						31.2 2.15

PENNSYLVANIA POWER COMPANY

ACCOUNT 368 LINE TRANSFORMERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 44-R1.5						
NET SALVAGE PERCENT.. 0						
1922	17.26	17	17			
1927	84.21	84	84			
1928	56.56	56	52	5	0.22	5
1929	3,603.02	3,584	3,346	257	0.45	257
1930	3,358.21	3,331	3,110	248	0.71	248
1931	2,247.79	2,222	2,074	174	0.97	174
1932	759.56	748	698	62	1.25	50
1933	1,475.18	1,436	1,341	134	2.25	60
1934	1,461.21	1,417	1,323	138	2.54	54
1935	1,390.61	1,343	1,254	137	2.83	48
1936	61.79	59	55	7	3.14	2
1937	175.62	170	159	17	2.80	6
1938	153.21	147	137	16	3.15	5
1939	110.59	106	99	12	3.50	3
1940	8.22	8	8			
1941	5.54	5	5	1	3.62	
1942	2,752.19	2,610	2,436	316	4.02	79
1943	1,016.72	958	894	123	4.42	28
1944	1,087.92	1,019	951	137	4.84	28
1945	9,999.35	9,375	8,752	1,247	4.69	266
1946	4,264.30	3,971	3,707	557	5.13	109
1948	10,209.39	9,442	8,814	1,395	5.49	254
1949	230.88	212	198	33	5.96	6
1950	75.42	69	64	11	5.93	2
1951	1,793.38	1,631	1,523	270	6.43	42
1952	3,385.25	3,074	2,870	515	6.43	80
1953	7,673.57	6,906	6,447	1,227	6.94	177
1955	143.41	128	119	24	7.52	3
1956	2,970.33	2,633	2,458	512	7.61	67
1957	89,225.87	78,822	73,581	15,645	7.72	2,027
1958	110,937.18	96,959	90,512	20,425	8.29	2,464
1959	175,853.75	153,010	142,836	33,018	8.44	3,912
1960	131,171.85	113,569	106,017	25,155	8.60	2,925
1961	129,123.23	110,478	103,132	25,991	9.20	2,825
1962	109,251.31	92,929	86,750	22,501	9.40	2,394
1963	130,057.03	109,924	102,615	27,442	9.61	2,856
1964	121,022.46	100,969	94,255	26,767	10.23	2,617
1965	104,878.31	86,860	81,084	23,794	10.48	2,270
1966	166,710.59	136,986	127,877	38,834	10.74	3,616
1967	376,152.67	306,489	286,109	90,044	11.02	8,171
1968	251,903.72	203,412	189,886	62,018	11.32	5,479
1969	262,017.55	209,562	195,627	66,391	11.64	5,704

PENNSYLVANIA POWER COMPANY

ACCOUNT 368 LINE TRANSFORMERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 44-R1.5						
NET SALVAGE PERCENT.. 0						
1970	272,684.58	215,884	201,529	71,156	11.97	5,945
1971	331,054.04	257,825	240,681	90,373	12.64	7,150
1972	404,622.68	311,559	290,842	113,781	12.99	8,759
1973	379,689.99	288,868	269,660	110,030	13.36	8,236
1974	455,396.84	342,094	319,347	136,050	13.75	9,895
1975	394,739.32	292,581	273,126	121,613	14.14	8,601
1976	505,601.67	369,494	344,925	160,677	14.55	11,043
1977	664,553.23	478,478	446,662	217,891	14.97	14,555
1978	822,167.91	582,753	544,004	278,164	15.41	18,051
1979	1,114,641.43	777,128	725,454	389,187	15.85	24,554
1980	945,611.18	647,933	604,849	340,762	16.31	20,893
1981	830,369.08	558,672	521,524	308,845	16.78	18,406
1982	978,654.25	645,912	602,963	375,691	17.26	21,767
1983	917,435.88	593,398	553,941	363,495	17.75	20,479
1984	1,175,315.86	747,853	698,125	477,191	18.00	26,511
1985	1,010,211.81	628,554	586,759	423,453	18.52	22,865
1986	1,567,717.82	952,702	889,353	678,365	19.04	35,628
1987	1,396,592.48	827,900	772,850	623,742	19.58	31,856
1988	1,618,928.71	934,931	872,764	746,165	20.12	37,086
1989	1,361,042.42	768,172	717,093	643,949	20.45	31,489
1990	2,114,700.36	1,159,279	1,082,194	1,032,506	21.01	49,144
1991	1,565,630.68	832,289	776,947	788,684	21.59	36,530
1992	2,155,790.58	1,114,544	1,040,434	1,115,357	21.95	50,814
1993	2,262,737.73	1,130,237	1,055,083	1,207,655	22.55	53,555
1994	1,693,779.95	819,451	764,963	928,817	22.94	40,489
1995	1,654,013.08	773,086	721,681	932,332	23.36	39,911
1996	1,482,772.66	665,024	620,804	861,969	23.98	35,945
1997	1,251,562.32	539,423	503,555	748,007	24.42	30,631
1998	1,758,950.55	726,447	678,143	1,080,808	24.87	43,458
1999	1,249,666.97	492,869	460,096	789,571	25.34	31,159
2000	893,564.93	335,176	312,889	580,676	25.82	22,489
2001	1,043,428.34	372,191	347,443	695,985	26.15	26,615
2002	1,148,913.96	386,265	360,581	788,333	26.66	29,570
2003	3,008,286.57	951,220	887,970	2,120,317	27.03	78,443
2004	5,169,316.97	1,528,050	1,426,444	3,742,873	27.41	136,551
2005	5,547,189.81	1,519,930	1,418,864	4,128,326	27.82	148,394
2006	4,952,877.92	1,251,592	1,168,368	3,784,510	28.09	134,728
2007	6,038,050.87	1,391,167	1,298,663	4,739,388	28.40	166,880
2008	5,632,072.29	1,170,345	1,092,524	4,539,548	28.60	158,725
2009	5,291,485.64	973,633	908,892	4,382,594	28.83	152,015
2010	5,915,973.42	943,598	880,854	5,035,119	28.98	173,745
2011	5,746,589.13	773,491	722,058	5,024,531	28.94	173,619

PENNSYLVANIA POWER COMPANY

ACCOUNT 368 LINE TRANSFORMERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 44-R1.5						
NET SALVAGE PERCENT.. 0						
2012	3,864,643.17	419,314	391,432	3,473,211	28.76	120,765
2013	3,622,538.35	293,426	273,915	3,348,623	28.36	118,076
2014	4,150,750.75	215,424	201,100	3,949,651	27.40	144,148
2015	4,383,163.67	87,663	81,834	4,301,330	24.56	175,136
	102,964,358.06	33,944,555	31,687,458	71,276,900		2,804,617
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						25.4 2.72

PENNSYLVANIA POWER COMPANY

ACCOUNT 369 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R4						
NET SALVAGE PERCENT.. 0						
1941	51.68	50	52			
1942	165.22	160	165			
1943	65.00	63	65			
1944	166.89	161	167			
1945	246.81	237	247			
1946	7,162.47	6,870	7,162			
1947	18,267.28	17,394	18,267			
1948	23,050.04	21,939	23,050			
1949	26,691.32	25,205	26,691			
1950	35,994.31	33,712	35,994			
1951	37,483.16	35,054	37,483			
1952	48,908.75	45,651	48,909			
1953	52,808.11	48,848	52,808			
1954	51,218.13	47,249	51,218			
1955	58,129.31	53,107	58,129			
1956	73,541.01	66,952	73,541			
1957	75,091.02	67,649	75,091			
1958	63,629.55	57,076	63,630			
1959	65,559.62	58,525	65,560			
1960	56,270.34	49,653	56,270			
1961	56,551.79	49,313	56,552			
1962	113,449.36	98,327	113,449			
1963	63,157.37	54,050	63,157			
1964	63,324.79	53,813	63,325			
1965	69,710.67	58,438	69,711			
1966	83,216.01	68,786	83,216			
1967	88,431.46	72,054	88,431			
1968	107,596.38	86,378	107,596			
1969	101,796.85	80,949	101,797			
1970	120,353.23	94,188	120,353			
1971	158,833.23	122,270	158,833			
1972	245,414.64	185,754	245,415			
1973	314,883.76	234,211	314,884			
1974	326,270.34	238,308	326,270			
1975	265,788.45	190,517	265,788			
1976	212,128.21	149,147	211,622	506	16.68	30
1977	223,496.27	154,034	218,556	4,940	17.36	285
1978	302,048.35	203,883	289,286	12,762	18.06	707
1979	307,002.88	202,806	287,758	19,245	18.75	1,026
1980	324,035.21	209,359	297,056	26,979	19.45	1,387
1981	359,997.77	226,043	320,728	39,270	20.45	1,920
1982	362,921.56	222,471	315,660	47,262	21.15	2,235

PENNSYLVANIA POWER COMPANY

ACCOUNT 369 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R4						
NET SALVAGE PERCENT.. 0						
1983	420,111.58	251,227	356,461	63,651	21.85	2,913
1984	461,421.00	268,916	381,560	79,861	22.55	3,542
1985	485,003.73	273,639	388,261	96,743	23.56	4,106
1986	674,491.17	370,093	525,118	149,373	24.26	6,157
1987	743,742.38	396,415	562,466	181,276	24.97	7,260
1988	1,111,688.48	571,630	811,076	300,612	25.98	11,571
1989	1,054,095.71	525,150	745,126	308,970	26.69	11,576
1990	1,486,678.18	712,714	1,011,257	475,421	27.69	17,169
1991	933,714.23	432,310	613,397	320,317	28.41	11,275
1992	893,538.18	396,910	563,168	330,370	29.41	11,233
1993	1,056,036.33	451,456	640,563	415,473	30.13	13,789
1994	1,835,421.70	749,770	1,063,835	771,587	31.13	24,786
1995	2,109,527.97	821,661	1,165,840	943,688	32.13	29,371
1996	2,181,034.82	812,217	1,152,440	1,028,595	32.86	31,302
1997	829,395.11	293,108	415,886	413,509	33.85	12,216
1998	239,282.97	79,968	113,465	125,818	34.86	3,609
1999	3,186,598.85	1,004,416	1,425,148	1,761,451	35.85	49,134
2000	134,086.33	39,904	56,619	77,467	36.58	2,118
2001	216,280.86	60,213	85,435	130,846	37.58	3,482
2002	223,804.78	58,010	82,309	141,496	38.58	3,668
2003	478,489.46	114,837	162,940	315,549	39.58	7,972
2004	821,641.60	181,418	257,411	564,231	40.58	13,904
2005	934,970.24	188,490	267,445	667,525	41.58	16,054
2006	1,597,434.27	292,969	415,689	1,181,745	42.31	27,931
2007	965,109.38	158,278	224,578	740,531	43.32	17,094
2008	809,327.39	117,191	166,280	643,047	44.31	14,512
2009	1,020,075.42	127,917	181,499	838,576	45.32	18,503
2010	888,946.62	94,406	133,951	754,996	46.31	16,303
2011	1,240,001.23	107,632	152,717	1,087,284	47.32	22,977
2012	1,083,355.36	73,235	103,912	979,443	48.31	20,274
2013	739,484.09	35,643	50,573	688,911	49.32	13,968
2014	1,170,269.92	33,938	48,154	1,122,116	50.31	22,304
2015	1,042,791.03	10,115	14,352	1,028,439	51.05	20,146
	38,032,758.97	13,796,450	19,152,873	18,879,886		499,809

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 37.8 1.31

PENNSYLVANIA POWER COMPANY

ACCOUNT 370.1 METERS - SMART GRID

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 15-S0.5						
NET SALVAGE PERCENT.. 0						
2008	2,124.43	1,071	630	1,494	7.38	202
2010	170,669.27	68,814	40,459	130,210	8.14	15,996
2013	439,862.11	92,723	54,517	385,345	9.36	41,169
2014	5,724,882.12	761,409	447,670	5,277,212	9.77	540,145
2015	21,159,288.73	994,487	584,709	20,574,580	10.13	2,031,054
	27,496,826.66	1,918,504	1,127,985	26,368,842		2,628,566
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						10.0 9.56

PENNSYLVANIA POWER COMPANY

ACCOUNT 371 INSTALLATIONS ON CUSTOMERS' PREMISES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 33-R2						
NET SALVAGE PERCENT.. 0						
1985	46,710.65	35,762	41,091	5,620	9.34	602
1986	137,608.86	103,110	118,474	19,135	9.87	1,939
1987	351,217.02	258,250	296,732	54,485	10.26	5,310
1988	198,820.13	143,250	164,596	34,224	10.67	3,207
1989	257,900.73	181,098	208,083	49,818	11.24	4,432
1990	381,535.43	261,733	300,734	80,801	11.67	6,924
1991	431,952.74	288,890	331,937	100,016	12.13	8,245
1992	325,746.63	211,279	242,762	82,985	12.73	6,519
1993	315,393.33	198,698	228,306	87,087	13.21	6,593
1994	58,013.55	35,423	40,701	17,313	13.71	1,263
1995	41,904.60	24,740	28,426	13,479	14.22	948
1996	96,339.56	54,663	62,808	33,532	14.87	2,255
1997	59,152.71	32,286	37,097	22,056	15.40	1,432
1998	65,869.53	34,463	39,598	26,272	15.95	1,647
1999	34,458.97	17,229	19,796	14,663	16.50	889
2000	41,670.97	19,894	22,858	18,813	16.97	1,109
2001	19,361.16	8,759	10,064	9,297	17.55	530
2002	24,464.01	10,436	11,991	12,473	18.15	687
2003	48,692.20	19,535	22,446	26,246	18.65	1,407
2004	75,572.36	28,249	32,459	43,113	19.27	2,237
2005	84,701.41	29,349	33,722	50,979	19.80	2,575
2006	122,670.44	39,034	44,851	77,819	20.35	3,824
2007	48,817.26	14,108	16,210	32,607	20.91	1,559
2008	52,253.51	13,560	15,581	36,673	21.40	1,714
2009	35,007.31	8,010	9,204	25,803	21.91	1,178
2010	82,292.82	16,245	18,666	63,627	22.36	2,846
2011	103,461.02	17,092	19,639	83,822	22.75	3,684
2012	69,340.79	9,125	10,484	58,857	23.10	2,548
2013	85,624.63	8,306	9,544	76,081	23.27	3,269
2014	41,195.48	2,505	2,878	38,317	23.19	1,652
2015	54,987.78	1,221	1,403	53,585	22.02	2,433
	3,792,737.59	2,126,302	2,443,141	1,349,597		85,457

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 15.8 2.25

PENNSYLVANIA POWER COMPANY

ACCOUNT 373.1 STREET LIGHTING AND SIGNAL SYSTEMS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 27-R2						
NET SALVAGE PERCENT.. 0						
1927	1,972.68	1,973	1,973			
1928	3,266.74	3,267	3,267			
1929	596.58	597	597			
1930	1,957.68	1,958	1,958			
1931	1,047.50	1,048	1,048			
1935	126.84	127	127			
1937	1,726.53	1,727	1,727			
1939	349.54	350	350			
1940	828.08	828	828			
1948	3,281.54	3,282	3,282			
1953	785.35	785	785			
1954	4,323.92	4,324	4,324			
1955	1,125.14	1,125	1,125			
1958	958.56	959	959			
1959	24.15	24	24			
1960	363.88	364	364			
1961	2,114.34	2,114	2,114			
1962	4,553.14	4,553	4,553			
1963	5,517.03	5,517	5,517			
1964	8,265.61	8,266	8,266			
1965	20,801.12	20,801	20,801			
1966	21,500.39	21,498	21,500			
1967	41,446.36	41,206	41,446			
1968	2,901.25	2,866	2,901			
1969	4,222.98	4,144	4,223			
1970	60,979.30	59,376	60,979			
1971	18,816.26	18,254	18,816			
1972	7,970.43	7,663	7,970			
1973	4,573.30	4,373	4,573			
1974	34,895.64	33,018	34,865	31	2.36	13
1975	55,986.36	52,605	55,548	438	2.60	168
1976	11,345.69	10,576	11,168	178	2.87	62
1977	12,614.78	11,656	12,308	307	3.17	97
1978	6,941.18	6,378	6,735	206	3.31	62
1979	62,705.27	56,987	60,175	2,530	3.66	691
1980	40,286.11	36,326	38,358	1,928	3.87	498
1981	4,891.02	4,353	4,597	294	4.26	69
1982	44,921.56	39,576	41,790	3,132	4.52	693
1983	12,447.92	10,842	11,449	999	4.81	208
1984	45,145.61	38,825	40,997	4,149	5.13	809
1985	107,921.55	91,507	96,626	11,296	5.47	2,065
1986	56,658.76	47,299	49,945	6,714	5.84	1,150

PENNSYLVANIA POWER COMPANY

ACCOUNT 373.1 STREET LIGHTING AND SIGNAL SYSTEMS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 27-R2						
NET SALVAGE PERCENT.. 0						
1987	70,090.71	57,530	60,749	9,342	6.22	1,502
1988	29,138.73	23,480	24,794	4,345	6.63	655
1989	210,053.29	166,446	175,758	34,295	6.94	4,942
1990	370,028.14	286,846	302,893	67,135	7.39	9,085
1991	409,379.59	309,900	327,237	82,143	7.86	10,451
1992	381,787.16	281,721	297,482	84,305	8.35	10,096
1993	396,244.04	285,296	301,257	94,987	8.75	10,856
1994	303,253.52	211,914	223,769	79,485	9.27	8,574
1995	216,426.49	146,867	155,083	61,343	9.71	6,318
1996	184,158.54	120,661	127,411	56,748	10.26	5,531
1997	123,252.71	77,982	82,345	40,908	10.74	3,809
1998	108,108.69	65,644	69,316	38,793	11.32	3,427
1999	57,579.83	33,534	35,410	22,170	11.83	1,874
2000	53,703.84	29,881	31,553	22,151	12.36	1,792
2001	168,822.41	89,341	94,339	74,483	12.90	5,774
2002	91,963.81	46,055	48,632	43,332	13.46	3,219
2003	315,481.94	148,655	156,972	158,510	14.03	11,298
2004	233,345.75	102,765	108,514	124,832	14.61	8,544
2005	304,504.14	124,694	131,670	172,834	15.14	11,416
2006	276,903.86	104,448	110,291	166,613	15.69	10,619
2007	177,302.88	60,886	64,292	113,011	16.25	6,955
2008	149,173.24	46,095	48,674	100,499	16.77	5,993
2009	159,329.02	43,497	45,931	113,398	17.31	6,551
2010	366,430.64	86,478	91,316	275,115	17.81	15,447
2011	655,481.45	129,523	136,769	518,712	18.28	28,376
2012	225,245.11	35,544	37,533	187,712	18.67	10,054
2013	305,829.02	35,537	37,525	268,304	19.01	14,114
2014	332,249.47	24,254	25,611	306,638	19.03	16,113
2015	218,135.36	5,846	6,173	211,962	18.16	11,672
	7,616,561.05	3,844,637	4,050,257	3,566,304		251,642

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 14.2 3.30

PENNSYLVANIA POWER COMPANY

ACCOUNT 373.2 STREET LIGHTING AND SIGNAL SYSTEMS - ESIP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 27-R2						
NET SALVAGE PERCENT.. 0						
2007	2,923.22	1,004	1,058	1,865	16.25	115
2009	3,092.00	844	889	2,203	17.31	127
2011	582.10	115	121	461	18.28	25
2012	1,646.55	260	274	1,373	18.67	74
2013	6,982.43	811	854	6,128	19.01	322
2014	4,477.95	327	344	4,134	19.03	217
2015	5,295.45	142	150	5,145	18.16	283
	24,999.70	3,503	3,690	21,310		1,163

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.3 4.65

PENNSYLVANIA POWER COMPANY

ACCOUNT 390.1 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R2.5						
NET SALVAGE PERCENT.. 0						
1949	570.00	523	564	6	5.96	1
1950	492.00	448	483	9	6.45	1
1951	104,508.13	95,040	102,492	2,016	6.43	314
1952	4,205.28	3,792	4,089	116	6.92	17
1953	4,213.70	3,792	4,089	125	6.94	18
1954	363.00	324	349	14	7.46	2
1956	203,294.86	180,241	194,374	8,921	7.61	1,172
1957	360.50	316	341	20	8.17	2
1958	1,900.00	1,661	1,791	109	8.29	13
1959	400.00	348	375	25	8.44	3
1960	637,826.77	548,659	591,679	46,148	9.02	5,116
1961	846.86	725	782	65	9.20	7
1962	10,724.39	9,065	9,776	948	9.79	97
1963	18,825.11	15,813	17,053	1,772	10.00	177
1964	19,897.50	16,600	17,902	1,996	10.23	195
1965	12,623.49	10,392	11,207	1,416	10.85	131
1966	21,493.68	17,556	18,933	2,561	11.10	231
1967	6,316.76	5,117	5,518	799	11.38	70
1969	132,161.93	104,474	112,666	19,496	12.32	1,582
1970	1,742.60	1,356	1,462	281	12.98	22
1972	1,731.22	1,318	1,421	310	13.65	23
1973	1,600.00	1,197	1,291	309	14.32	22
1974	16,080.83	11,879	12,810	3,271	14.68	223
1975	10,420.76	7,555	8,147	2,274	15.36	148
1976	1,758.92	1,258	1,357	402	15.75	26
1977	5,221.00	3,658	3,945	1,276	16.45	78
1978	4,304.73	2,970	3,203	1,102	16.85	65
1979	5,569.01	3,760	4,055	1,514	17.56	86
1980	489,012.53	324,607	350,059	138,954	17.98	7,728
1981	3,654.98	2,371	2,557	1,098	18.69	59
1982	43,870.93	27,924	30,113	13,758	19.13	719
1984	41,943.65	25,502	27,502	14,442	20.31	711
1985	42,001.06	24,852	26,801	15,200	21.05	722
1986	8,182.44	4,731	5,102	3,080	21.52	143
1987	28,215.49	15,840	17,082	11,133	22.26	500
1988	7,906.98	4,327	4,666	3,241	22.75	142
1989	1,136.72	602	649	488	23.50	21
1990	32,816.13	16,904	18,229	14,587	24.00	608
1991	71,343.41	35,486	38,268	33,075	24.76	1,336
1992	703,404.81	338,900	365,473	337,932	25.28	13,368
1993	432,139.62	200,297	216,002	216,138	26.04	8,300
1994	10,589.59	4,736	5,107	5,483	26.58	206

PENNSYLVANIA POWER COMPANY

ACCOUNT 390.1 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R2.5						
NET SALVAGE PERCENT.. 0						
1995	212,313.51	90,955	98,087	114,227	27.35	4,176
2000	6,367.43	2,142	2,310	4,057	30.58	133
2003	1,306,717.77	362,614	391,047	915,671	32.55	28,131
2005	185,530.54	44,026	47,478	138,053	33.75	4,090
2006	148,817.38	32,085	34,601	114,216	34.56	3,305
2008	209,672.99	36,483	39,343	170,330	35.60	4,785
2010	78,387.18	10,175	10,973	67,414	36.87	1,828
2011	23,709.52	2,551	2,751	20,959	37.34	561
2012	18,303.34	1,556	1,678	16,625	37.65	442
2013	191,100.37	11,810	12,736	178,364	37.98	4,696
2014	82,023.09	3,125	3,370	78,653	37.87	2,077
2015	1,028.01	14	15	1,013	36.68	28
	5,609,642.50	2,674,452	2,884,153	2,725,490		98,657
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						27.6 1.76

PENNSYLVANIA POWER COMPANY

ACCOUNT 390.2 STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R2.5						
NET SALVAGE PERCENT.. 0						
2008	41,239.11	7,176	7,739	33,500	35.60	941
2015	60.04	1	1	59	36.68	2
	41,299.15	7,177	7,740	33,559		943
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						35.6 2.28

PENNSYLVANIA POWER COMPANY

ACCOUNT 391.1 OFFICE FURNITURE AND EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
1949	0.01					
1950	0.01					
1951	0.06					
1952	0.05					
1953	0.08					
1954	0.10					
1955	0.18					
1956	22.55	23	23			
1957	36.40	36	36			
1958	36.44	36	36			
1959	37.94	38	38			
1960	56.20	56	56			
1961	66.75	67	67			
1962	113.57	114	114			
1963	227.11	227	227			
1964	143.64	144	144			
1965	122.66	123	123			
1966	179.27	179	179			
1967	200.14	200	200			
1968	310.25	310	310			
1969	229.09	229	229			
1970	311.99	312	312			
1971	609.42	609	609			
1972	778.99	779	779			
1973	548.69	549	549			
1974	562.50	562	562			
1975	488.75	489	489			
1976	1,825.84	1,826	1,826			
1977	2,102.18	2,102	2,102			
1978	2,622.28	2,622	2,622			
1979	4,122.38	4,122	4,122			
1980	2,102.12	2,102	2,102			
1981	6,077.55	6,078	6,078			
1982	8,349.90	8,350	8,350			
1983	7,390.76	7,391	7,391			
1984	7,841.31	7,841	7,841			
1985	9,222.71	9,223	9,223			
1986	5,569.12	5,569	5,569			
1987	6,174.33	6,174	6,174			
1988	4,397.46	4,397	4,397			
1989	56,574.96	56,575	56,575			
1990	25,448.78	25,449	25,449			

PENNSYLVANIA POWER COMPANY

ACCOUNT 391.1 OFFICE FURNITURE AND EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
1991	125,308.11	125,308	125,308			
1992	38,684.17	38,684	38,684			
1993	29,335.54	29,336	29,336			
1994	62,756.72	62,757	62,757			
1995	20,754.41	20,754	20,754			
1996	65,039.07	63,413	35,652	29,387	0.50	29,387
1997	95,057.15	87,928	49,434	45,623	1.50	30,415
1998	110,169.27	96,398	54,196	55,973	2.50	22,389
1999	15,464.75	12,758	7,173	8,292	3.50	2,369
2000	6,286.28	4,872	2,739	3,547	4.50	788
2001	2,584.00	1,873	1,053	1,531	5.50	278
2002	214.61	145	82	133	6.50	20
2004	9,120.21	5,244	2,948	6,172	8.50	726
2008	3,008.83	1,128	634	2,375	12.50	190
2009	1,198.60	390	219	980	13.50	73
2015	6.54			7	19.50	
	739,892.78	705,891	585,872	154,021		86,635
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						1.8 11.71

PENNSYLVANIA POWER COMPANY

ACCOUNT 391.2 DATA PROCESSING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 5-SQUARE						
NET SALVAGE PERCENT.. 0						
2003	1,839.79	1,840	1,840			
2004	12,169.76	12,170	12,170			
2005	30,214.56	30,215	30,215			
2006	19,302.93	19,303	19,303			
2007	37,465.14	37,465	37,465			
2008	206,984.06	206,984	206,984			
2009	34,213.53	34,214	34,214			
2010	391,895.54	391,896	391,896			
2011	809,980.50	728,982	473,261	336,720	0.50	336,720
2012	424.10	297	193	231	1.50	154
2013	38,837.53	19,419	12,607	26,231	2.50	10,492
2014	195,790.30	58,737	38,132	157,658	3.50	45,045
2015	112,354.88	11,235	7,294	105,061	4.50	23,347
	1,891,472.62	1,552,757	1,265,574	625,899		415,758
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 1.5						21.98

PENNSYLVANIA POWER COMPANY

ACCOUNT 391.25 DATA PROCESSING EQUIPMENT - SMART GRID

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 5-SQUARE						
NET SALVAGE PERCENT.. 0						
2013	5,570.72	2,785	3,504	2,067	2.50	827
2014	472,801.24	141,840	178,439	294,362	3.50	84,103
2015	2,004,244.56	200,424	252,139	1,752,106	4.50	389,357
	2,482,616.52	345,049	434,082	2,048,535		474,287
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						4.3 19.10

PENNSYLVANIA POWER COMPANY

ACCOUNT 392 TRANSPORTATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 10-L2						
NET SALVAGE PERCENT.. 0						
1963	1,534.08	1,534	1,534			
1971	1,311.61	1,312	1,312			
1977	4,867.15	4,867	4,867			
1980	9,527.95	9,528	9,528			
1981	6,200.00	6,200	6,200			
1983	14,623.92	14,624	14,624			
1994	13,412.00	12,745	9,116	4,296	1.12	3,836
1996	3,827.00	3,552	2,541	1,286	1.51	852
2010	194,531.10	110,105	78,753	115,778	4.22	27,436
2015	345,042.91	21,772	15,573	329,470	7.42	44,403
	594,877.72	186,239	144,048	450,830		76,527

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.9 12.86

PENNSYLVANIA POWER COMPANY

ACCOUNT 393 STORES EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 30-SQUARE						
NET SALVAGE PERCENT.. 0						
1956	1,422.00	1,422	1,422			
1957	473.40	473	473			
1958	3,085.71	3,086	3,086			
1959	4,380.08	4,380	4,380			
1960	2,242.77	2,243	2,243			
1961	1,015.08	1,015	1,015			
1962	3,126.97	3,127	3,127			
1963	111.63	112	112			
1964	3,237.46	3,237	3,237			
1965	71.42	71	71			
1966	313.77	314	314			
1967	167.87	168	168			
1968	3,269.39	3,269	3,269			
1969	120.94	121	121			
1970	1,026.34	1,026	1,026			
1971	39.27	39	39			
1972	5,895.65	5,896	5,896			
1973	2,324.17	2,324	2,324			
1974	1,555.34	1,555	1,555			
1975	1,335.80	1,336	1,336			
1976	297.56	298	298			
1977	702.94	703	703			
1978	10,015.24	10,015	10,015			
1979	305.24	305	305			
1980	879.89	880	880			
1982	18,230.62	18,231	18,231			
1983	1,479.39	1,479	1,479			
1984	508.35	508	508			
1985	2,547.26	2,547	2,547			
1986	183.57	181	87	97	0.50	97
1987	453.64	431	206	248	1.50	165
1990	18,188.12	15,460	7,395	10,793	4.50	2,398
1991	56,017.99	45,748	21,882	34,136	5.50	6,207
1996	26,718.30	17,367	8,307	18,411	10.50	1,753
	171,743.17	149,367	108,057	63,686		10,620

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.0 6.18

PENNSYLVANIA POWER COMPANY

ACCOUNT 394 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
1956	285.35	285	285			
1957	1,639.94	1,640	1,640			
1958	2,666.37	2,666	2,666			
1959	2,810.22	2,810	2,810			
1960	3,531.37	3,531	3,531			
1961	1,746.01	1,746	1,746			
1962	2,875.31	2,875	2,875			
1963	1,393.47	1,393	1,393			
1964	2,009.01	2,009	2,009			
1965	2,056.90	2,057	2,057			
1966	5,979.09	5,979	5,979			
1967	6,336.06	6,336	6,336			
1968	6,047.25	6,047	6,047			
1969	4,908.12	4,908	4,908			
1970	2,916.45	2,916	2,916			
1971	7,344.27	7,344	7,344			
1972	3,333.25	3,333	3,333			
1973	4,647.48	4,647	4,647			
1974	9,451.25	9,451	9,451			
1975	6,872.56	6,873	6,873			
1976	13,644.00	13,644	13,644			
1977	28,001.55	28,002	28,002			
1978	32,549.53	32,550	32,550			
1979	29,153.79	29,154	29,154			
1980	21,860.33	21,860	21,860			
1981	83,913.92	83,914	83,914			
1982	36,233.85	36,234	36,234			
1983	56,209.69	56,210	56,210			
1984	42,385.88	42,386	42,386			
1985	52,271.28	52,271	52,271			
1986	53,556.71	53,557	53,557			
1987	48,988.99	48,989	48,989			
1988	12,040.98	12,041	12,041			
1989	53,620.48	53,620	53,620			
1990	31,909.11	31,909	31,909			
1991	73,809.21	72,333	12,485	61,324	0.50	61,324
1992	83,006.33	78,026	13,468	69,538	1.50	46,359
1993	87,471.47	78,724	13,588	73,883	2.50	29,553
1994	38,655.26	33,244	5,738	32,917	3.50	9,405
1995	3,488.60	2,861	494	2,995	4.50	666
1996	18,168.72	14,172	2,446	15,723	5.50	2,859
1997	11,246.67	8,323	1,437	9,810	6.50	1,509

PENNSYLVANIA POWER COMPANY

ACCOUNT 394 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
1998	58,850.59	41,195	7,110	51,741	7.50	6,899
1999	51,776.59	34,173	5,898	45,879	8.50	5,398
2005	296,211.09	124,409	21,474	274,737	14.50	18,947
2008	168,668.95	50,601	8,734	159,935	17.50	9,139
2009	79.57	21	4	76	18.50	4
2010	55,280.89	12,162	2,099	53,182	19.50	2,727
2011	7,431.35	1,338	231	7,200	20.50	351
2012	310,233.29	43,433	7,497	302,736	21.50	14,081
2013	385,593.78	38,559	6,656	378,938	22.50	16,842
2014	83,281.45	4,997	862	82,419	23.50	3,507
2015	24,598.40	492	85	24,513	24.50	1,001
	2,433,042.03	1,314,250	785,493	1,647,549		230,571
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.1						9.48

PENNSYLVANIA POWER COMPANY

ACCOUNT 395 LABORATORY EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
1956	2.66	3	3			
1957	3.56	4	4			
1958	9.13	9	9			
1959	6.22	6	6			
1960	8.71	9	9			
1961	17.62	18	18			
1962	3.89	4	4			
1963	10.81	11	11			
1964	64.01	64	64			
1965	56.75	57	57			
1966	43.41	43	43			
1967	169.27	169	169			
1968	57.28	57	57			
1969	260.49	260	260			
1970	218.49	218	218			
1971	200.83	201	201			
1972	1,270.02	1,270	1,270			
1973	2,587.24	2,587	2,587			
1974	529.84	530	530			
1975	892.71	893	893			
1976	341.30	341	341			
1977	543.92	544	544			
1978	15.38	15	15			
1979	276.21	276	276			
1980	1,185.57	1,186	1,186			
1981	2,095.94	2,096	2,096			
1982	509.68	510	510			
1983	250.56	251	251			
1984	2,454.36	2,454	2,454			
1985	417.59	418	418			
1986	296.48	296	296			
1992	6,739.37	6,739	6,739			
1993	5,263.85	5,264	5,264			
1994	16,590.35	16,590	16,590			
1995	3,641.33	3,641	3,641			
1996	4,361.85	4,253	2,235	2,127	0.50	2,127

PENNSYLVANIA POWER COMPANY

ACCOUNT 395 LABORATORY EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2008	21,537.11	8,076	4,244	17,293	12.50	1,383
2009	1.82	1		2	13.50	
2015	31.95	1	1	31	19.50	2
	72,967.56	59,365	53,514	19,454		3,512
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						5.5 4.81

PENNSYLVANIA POWER COMPANY

ACCOUNT 396 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 18-S1.5						
NET SALVAGE PERCENT.. 0						
1992	3,620.00	3,207	3,149	471	3.02	156
2008	236,313.10	105,986	104,063	132,250	9.22	14,344
2009	126,250.06	50,298	49,385	76,865	9.81	7,835
2010	94,187.12	32,429	31,840	62,347	10.47	5,955
2015	665.05	22	22	643	14.45	44
	461,035.33	191,942	188,459	272,576		28,334
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						9.6 6.15

PENNSYLVANIA POWER COMPANY

ACCOUNT 397 COMMUNICATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
1957	154.04	154	154			
1960	184.38	184	184			
1961	36.92	37	37			
1962	40.45	40	40			
1963	233.60	234	234			
1964	89.15	89	89			
1966	825.02	825	825			
1967	16.19	16	16			
1968	39.84	40	40			
1972	231.66	232	232			
1973	52.91	53	53			
1974	8,501.71	8,502	8,502			
1975	963.53	964	964			
1976	21,294.98	21,295	21,295			
1977	20,000.46	20,000	20,000			
1978	13,452.16	13,452	13,452			
1979	785.09	785	785			
1980	6,865.88	6,866	6,866			
1981	15,769.15	15,769	15,769			
1982	4,800.98	4,801	4,801			
1983	5,534.44	5,534	5,534			
1984	49.82	50	50			
1985	4,641.13	4,641	4,641			
1986	22,091.10	22,091	22,091			
1987	46,051.89	46,052	46,052			
1988	10,465.93	10,466	10,466			
1989	26,915.65	26,916	26,916			
1991	9,396.63	9,397	9,397			
1992	1,567.24	1,567	1,567			
1993	19,262.11	19,262	19,262			
1994	6,409.67	6,410	6,410			
1995	37,008.97	37,009	37,009			
1996	5,474.34	5,474	5,474			
1999	16,952.63	16,953	16,953			
2001	105,044.68	101,544	39,081-	144,126	0.50	144,126
2002	31,986.37	28,788	11,080-	43,066	1.50	28,711
2006	1,912.24	1,211	466-	2,378	5.50	432
2008	116,125.35	58,063	22,346-	138,471	7.50	18,463
2009	251,569.31	109,013	41,955-	293,524	8.50	34,532
2010	99,246.05	36,391	14,006-	113,252	9.50	11,921
2011	78.52	24	9-	88	10.50	8
2012	8,288.02	1,934	744-	9,032	11.50	785

PENNSYLVANIA POWER COMPANY

ACCOUNT 397 COMMUNICATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2013	927,172.55	154,532	59,474-	986,647	12.50	78,932
2014	5,086.63	509	196-	5,283	13.50	391
2015	273,198.59	9,106	3,505-	276,704	14.50	19,083
	2,125,867.96	807,275	113,298	2,012,570		337,384
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.0						15.87

PENNSYLVANIA POWER COMPANY

ACCOUNT 398 MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
1956	0.95	1	1			
1957	17.72	18	18			
1958	167.72	168	168			
1959	10.60	11	11			
1960	418.86	419	419			
1961	71.97	72	72			
1962	24.38	24	24			
1963	669.26	669	669			
1964	57.87	58	58			
1965	110.53	111	111			
1966	304.02	304	304			
1967	150.64	151	151			
1968	67.56	68	68			
1969	113.36	113	113			
1970	255.00	255	255			
1971	86.64	87	87			
1972	43.33	43	43			
1973	174.54	175	175			
1974	1,096.19	1,096	1,096			
1975	12.69	13	13			
1976	1,638.79	1,639	1,639			
1977	246.20	246	246			
1978	751.46	751	751			
1979	5,582.07	5,582	5,582			
1980	2,887.45	2,887	2,887			
1981	911.87	912	912			
1982	2,726.93	2,727	2,727			
1983	1,006.39	1,006	1,006			
1984	1,553.48	1,553	1,553			
1985	807.78	808	808			
1986	40.43	40	40			
1987	252.05	252	252			
1988	1,508.63	1,509	1,509			
1989	790.38	790	790			
1990	1,594.24	1,594	1,594			
1991	745.42	745	745			
1992	429.18	429	429			
1993	1,107.68	1,108	1,108			
1995	1,589.42	1,589	1,589			

PENNSYLVANIA POWER COMPANY

ACCOUNT 398 MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2015

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
1996	26,160.03	25,506	16,569	9,591	0.50	9,591
2011	7,594.65	1,709	1,110	6,485	15.50	418
2015	11.30			11	19.50	1
	63,789.66	57,238	47,702	16,088		10,010
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 1.6						15.69

PART III. EXPERIENCED NET SALVAGE

PENNSYLVANIA POWER COMPANY

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2011 TRANSACTION YEAR				
355.00	1,463.26			
356.10	5,343.55			
362.00	31,529.28	1,520.83		1,520.83-
364.00	137,201.30	353,850.62	4,269.78	349,580.84-
365.00	488,425.91	327,347.54	19,772.29	307,575.25-
366.00	374.00			
367.00	18,721.39	1,156.79	41.83	1,114.96-
368.00	1,392,169.72	5,241.26	81.21	5,160.05-
369.00	34,738.73	161,672.05	2,916.59	158,755.46-
371.00	17,960.60	4,187.36	577.25	3,610.11-
373.10	398,255.25	69,806.93	390.14	69,416.79-
391.20	168,226.23			
392.00	11,279.81			
	2,705,689.03	924,783.38	28,049.09	896,734.29-
2012 TRANSACTION YEAR				
355.00	1,857.13	35,861.06		35,861.06-
356.10	1,189.02	11,667.87		11,667.87-
362.00	21,497.49			
364.00	128,295.58	468,356.42		468,356.42-
365.00	722,902.40	519,867.34		519,867.34-
366.00	477.30			
367.00	31,803.40	15,595.25		15,595.25-
368.00	1,031,925.10	185,933.76		185,933.76-
369.00	5,028.77	140,833.72		140,833.72-
371.00	25,663.28	12,634.18		12,634.18-
373.10	248,005.97	69,812.69		69,812.69-
373.20	18,890.99	12,718.49		12,718.49-
391.20	86,637.54			
392.00	82,066.61			
	2,406,240.58	1,473,280.78		1,473,280.78-

PENNSYLVANIA POWER COMPANY

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2013 TRANSACTION YEAR				
353.00	22,778.02	48,560.22		48,560.22-
355.00	17,762.85	3,252.85		3,252.85-
356.10	10,857.43	51.28		51.28-
362.00	378,579.47	520,665.89		520,665.89-
364.00	156,324.53	1,092,276.41	167.86	1,092,108.55-
365.00	965,517.67	1,227,445.37	80.32	1,227,365.05-
366.00	594.81	439.41		439.41-
367.00	278,037.65	408,750.48		408,750.48-
368.00	1,307,344.41	510,189.38		510,189.38-
369.00	18,254.94	149,726.71		149,726.71-
370.10	4,699.69	3,513.53		3,513.53-
371.00	58,293.63	17,617.70		17,617.70-
373.10	115,582.21	62,686.99		62,686.99-
373.20	51,905.75	23,946.56		23,946.56-
391.20	388,643.50	27,891.33		27,891.33-
	3,775,176.56	4,097,014.11	248.18	4,096,765.93-
2014 TRANSACTION YEAR				
352.10	190.25	1,549.65		1,549.65-
353.00	28,798.62	844.17		844.17-
355.00	308.11	22,084.12		22,084.12-
356.10		12,111.73		12,111.73-
362.00	538,426.00	166,530.97		166,530.97-
364.00	159,354.52	467,581.73	1,482.81	466,098.92-
365.00	1,370,126.05	970,948.36	31.81	970,916.55-
366.00	3,105.45	1,082.54		1,082.54-
367.00	176,190.79	187,384.00		187,384.00-
368.00	1,890,948.38	323,360.85		323,360.85-
369.00	13,365.68	97,706.45	1.41	97,705.04-
371.00	28,520.72	9,162.55		9,162.55-
373.10	105,153.54	35,346.79	233.82	35,112.97-
373.20	4,870.14	453.42		453.42-
390.10	12,177.50	13,712.56		13,712.56-
391.20	424,309.21			
	4,755,844.96	2,309,859.89	1,749.85	2,308,110.04-

PENNSYLVANIA POWER COMPANY

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2015 TRANSACTION YEAR				
352.10	1,591.55			
353.00	68,336.93			
355.00	970.26	2,167.61		2,167.61-
356.10		2,948.95		2,948.95-
362.00	421,926.04	1,316.45		1,316.45-
364.00	254,503.80	572,486.14		572,486.14-
365.00	1,030,532.87	686,375.24		686,375.24-
366.00	53.72	56.38		56.38-
367.00	83,335.52	40,435.35		40,435.35-
368.00	1,483,782.19	285,595.58		285,595.58-
369.00	259.05-	103,281.74		103,281.74-
370.10	109,977.39	6.31-		6.31
371.00	16,266.49	3,474.90		3,474.90-
373.10	115,314.15	75,696.03		75,696.03-
373.20	3,431.54			
391.20	399,131.13			
392.00	50,943.00		5,309.70	5,309.70
	4,039,837.53	1,773,828.06	5,309.70	1,768,518.36-
TOTAL	17,682,788.66	10,578,766.22	35,356.82	10,543,409.40-

PENNSYLVANIA POWER COMPANY

READING, PENNSYLVANIA

2016 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION
ACCRUALS RELATED TO ELECTRIC PLANT
AS OF DECEMBER 31, 2016

Prepared by:



Excellence Delivered As Promised

PENNSYLVANIA POWER COMPANY
Reading, Pennsylvania

2016 DEPRECIATION STUDY
CALCULATED ANNUAL DEPRECIATION
ACCRUALS RELATED TO ELECTRIC PLANT
AS OF DECEMBER 31, 2016

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC
Camp Hill, Pennsylvania



*Excellence Delivered **As Promised***

April 14, 2016

Pennsylvania Power Company
2800 Pottsville Pike
Reading, PA 19605-2469

Attention Mr. Charles V. Fullem
Director, Rates & Regulatory Affairs - PA

Ladies and Gentlemen:

Pursuant to your request, we have determined the annual depreciation accruals applicable to electric plant in service. The results of our study as of December 31, 2016 are presented in the attached report. The results of our study as of December 31, 2015 are presented in our report titled "2015 Depreciation Study - Calculated Annual Depreciation Accruals Related to Electric Plant as of December 31, 2015". The same methods, procedures and estimates are used in both studies.

The attached report sets forth a description of the methods and procedures upon which the studies were based, the estimates of survivor curves and the calculated annual depreciation rates as of December 31, 2016.

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

A handwritten signature in black ink that reads 'John J. Spanos'.

JOHN J. SPANOS
Sr. Vice President

JJS:krm

061041.003

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PART I. INTRODUCTION

**PENNSYLVANIA POWER COMPANY
DEPRECIATION STUDY**

PART I. INTRODUCTION

SCOPE

This report sets forth the results of the depreciation study conducted for Pennsylvania Power Company to determine the annual depreciation accrual rates and amounts for ratemaking purposes applicable to the original cost of electric plant as of December 31, 2016.

The depreciation accrual rates and amounts presented herein are based on estimated survivor curves and on methods and procedures set forth in previous orders approved by the Pennsylvania Public Utility Commission. The estimated survivor curves presented herein were based on the results of a service life study incorporating statistical analyses of data through 2014.

BASIS OF STUDY

Depreciation and Amortization

Depreciation, as defined in the Uniform System of Accounts, is the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of electric plant in the course of service from causes which are known to be in current operation and against which the utility is not protected by insurance. Among the causes to be given consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand, and requirements of public authorities.

Depreciation, as used in accounting, is a method of distributing fixed capital costs over a period of time by allocating annual amounts to expense. Each annual

amount of such depreciation expense is part of that year's total cost of providing utility service. Normally, the period of time over which the fixed capital cost is allocated to the cost of service is equal to the period of time over which an item renders service, that is, the item's service life. The most prevalent method of allocation is to distribute an equal amount of cost to each year of service life. This method is known as the straight line method of depreciation.

The calculation of annual and accrued depreciation based on the straight line method requires the estimation of survivor curves and the selection of group depreciation procedures. These subjects are discussed in the sections which follow. For most plant accounts, depreciation accruals and accrued depreciation were calculated using the straight line method, the remaining life basis, and the equal life group (ELG) procedure for all vintages. The calculations were based on the attained ages and estimated service life characteristics for each depreciable group of electric property. For certain general plant accounts, the amortization amounts, annual and accrued, were based on the age of the vintage and the selected amortization period.

Survivor curves were used to reflect the expected dispersion of retirements, thus providing a consistent method of estimating service lives and depreciation for mass property. Iowa type curves were used to depict the estimated survivor curves. For life span groups, the estimate of life characteristics is consistent because the calculated lives of the units within a group are obtained by employing a single probable retirement date for the entire group.

Service Life Estimates

The method of estimating service life consisted of compiling the service life history of the plant accounts, subaccounts or depreciable groups, reducing this history to trends through the use of acceptable actuarial techniques, and forecasting the trend of survivors for each depreciable group on the basis of interpretations of past trends and consideration of Company plans for the future. The combination of the historical trend and the estimated future trend yielded a complete pattern of life characteristics from which the average service life was derived.

The Company's service life estimates used in the depreciation calculation incorporated historical data compiled through 2014 from the property records of the Company. Such data included plant additions, retirements, transfers and other activity. Generally, retirement data for the years 1943 through 2014 were used in the actuarial life table computations which were the primary statistical support of the service life estimates.

A general understanding of the function of the plant and information with respect to the reasons for past retirements and the expected future causes of retirement was obtained through field trips conducted during the course of the service life study. Discussions with operating and management personnel also provided information regarding plans for the future which was incorporated in the interpretation and extrapolation of the statistical analyses.

AMORTIZATION OF NET SALVAGE

Inasmuch as this report relates primarily to Pennsylvania rate regulation practices, under which experienced costs of negative net salvage are amortized after their occurrence, no adjustments for expected salvage were made to either the annual

depreciation accrual or the calculated accrued depreciation for the individual accounts. The annual provision for recovering negative net salvage is based on the amortization of net salvage over a five-year period, as established by the Commission.

PART II. ESTIMATION OF SURVIVOR CURVES

PART II. ESTIMATION OF SURVIVOR CURVES

Survivor Curves

The use of an average service life for a property group implies that the various units in the group have different lives. Thus, the average life may be obtained by determining the separate lives of each of the units, or by constructing a survivor curve by plotting the number of units which survive at successive ages. The use of survivor curves, which reflect experienced and expected dispersion of service lives, is a systematic and rational means of estimating average service lives to be used to calculate depreciation for utility property. A discussion of the general concept of survivor curves and the Iowa type survivor curves is presented.

The survivor curve graphically depicts the amount of property existing at each age throughout the life of an original group. From the survivor curve, the average life of the group, the remaining life expectancy, the probable life and the frequency curve can be calculated. In Figure 1, a typical smooth survivor curve and the derived curves are illustrated. The average life is obtained by calculating the area under the survivor curve, from age zero to the maximum age, and dividing this area by the ordinate at age zero. The remaining life expectancy at any age can be calculated by obtaining the area under the curve, from the observation age to the maximum age, and dividing this area by the percent surviving at the observation age. For example, in Figure 1 the remaining life at age 30 years is equal to the crosshatched area under the survivor curve divided by 29.5 percent surviving at age 30. The probable life at any age is developed by adding the age and remaining life. If the probable life of the property is calculated for each year of age, the probable life curve shown in the chart can be developed. The frequency curve presents the number of units

retired in each age interval and is derived by obtaining the differences between the amount of property surviving at the beginning and at the end of each interval.

Iowa Type Curves

The range of survivor characteristics usually experienced by utility and industrial properties is encompassed by a system of generalized survivor curves known as the Iowa type curves. There are four families in the Iowa system, labeled in accordance with the location of the modes of the retirements in relationship to the average life and the relative height of the modes. The left moded curves, presented in Figure 2, are those in which the greatest frequency of retirement occurs to the left of, or prior to, average service life. The symmetrical moded curves, presented in Figure 3, are those in which the greatest frequency of retirement occurs at average service life. The right moded curves, presented in Figure 4, are those in which the greatest frequency occurs to the right of, or after, average service life. The origin moded curves, presented in Figure 5, are those in which the greatest frequency of retirement occurs at the origin, or immediately after age zero. The letter designation of each family of curves (L, S, R or O) represents the location of the mode of the associated frequency curve with respect to the average service life. The numerical subscripts represent the relative heights of the modes of the frequency curves within each family.

The Iowa curves were developed at the Iowa State College Engineering Experiment Station through an extensive process of observation and classification of the ages at which industrial property had been retired. A report of the study which resulted in the classification of property survivor characteristics into 18 type curves, which constitute three of the four families, was published in 1935 in the form of the

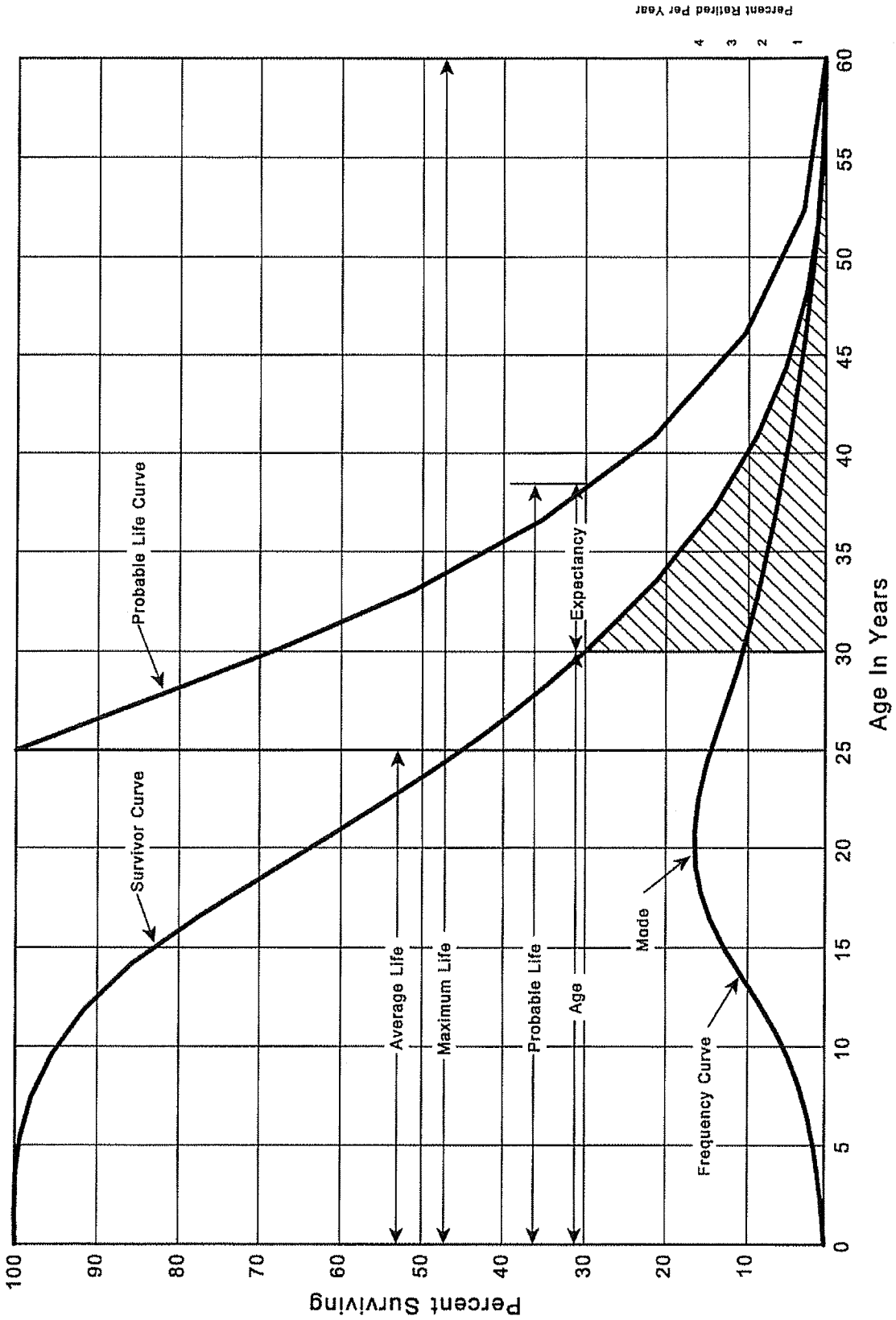


Figure 1. A Typical Survivor Curve and Derived Curves

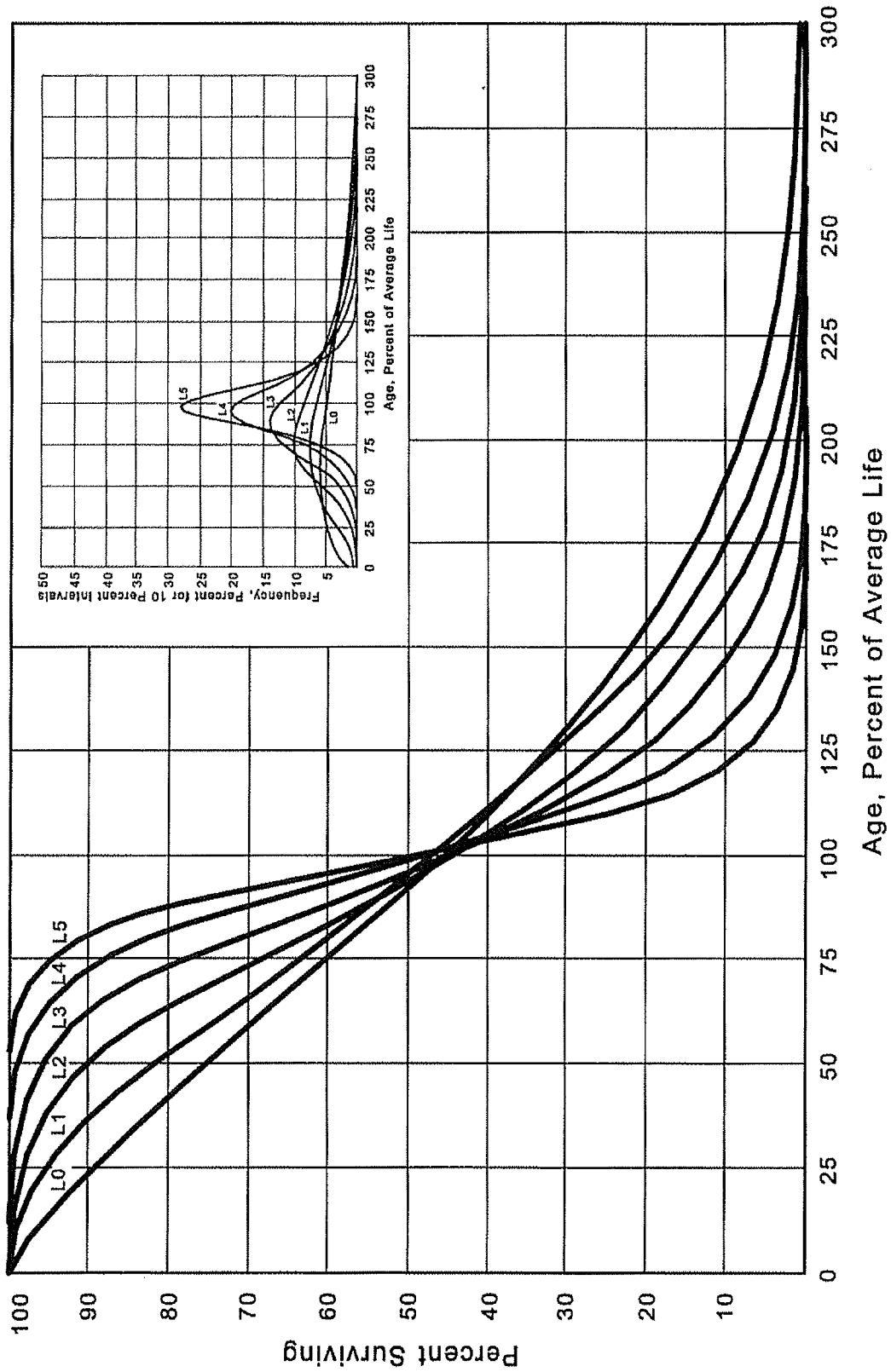


Figure 2. Left Modal or "L" Iowa Type Survivor Curves

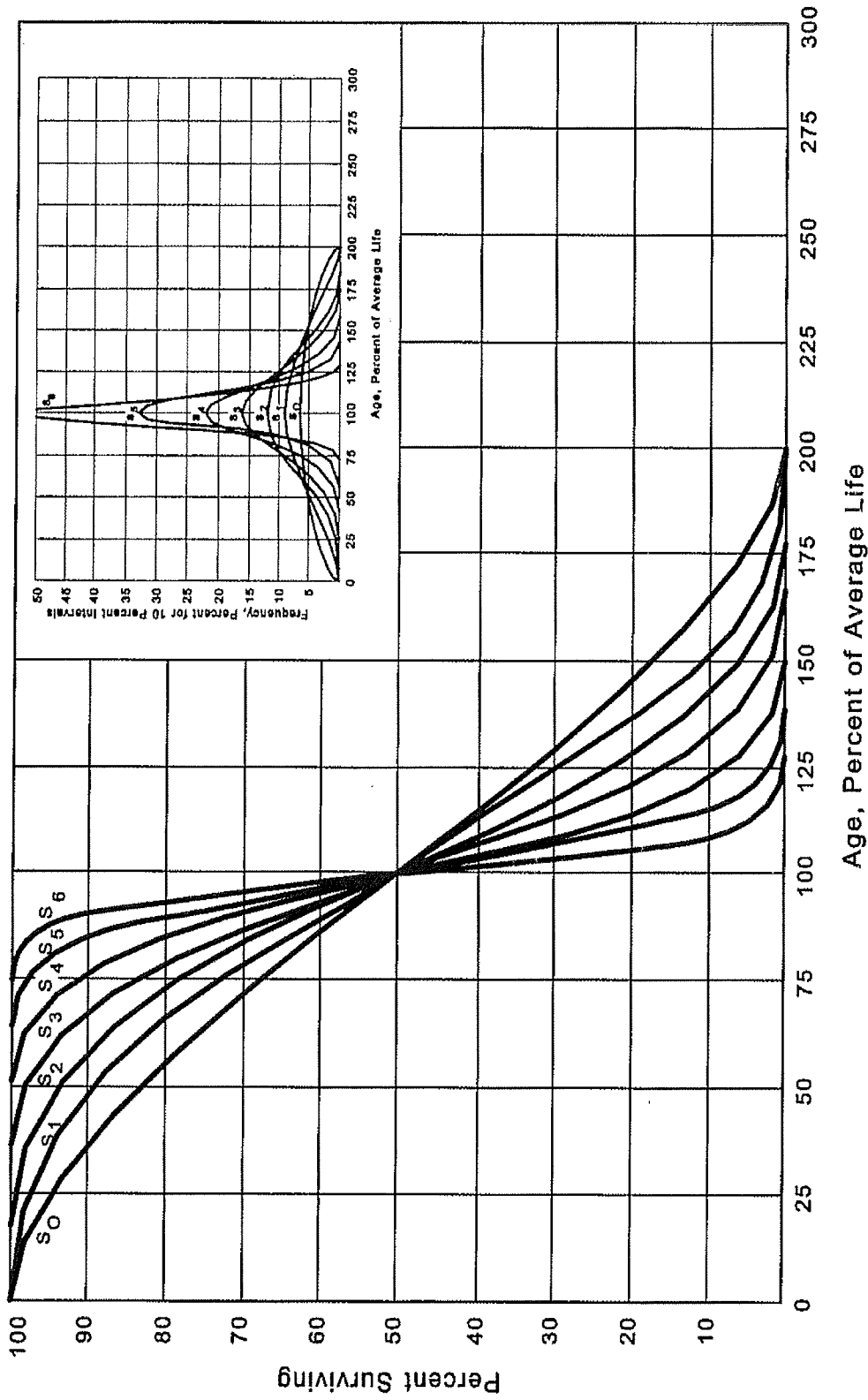


Figure 3. Symmetrical or "S" Iowa Type Survivor Curves

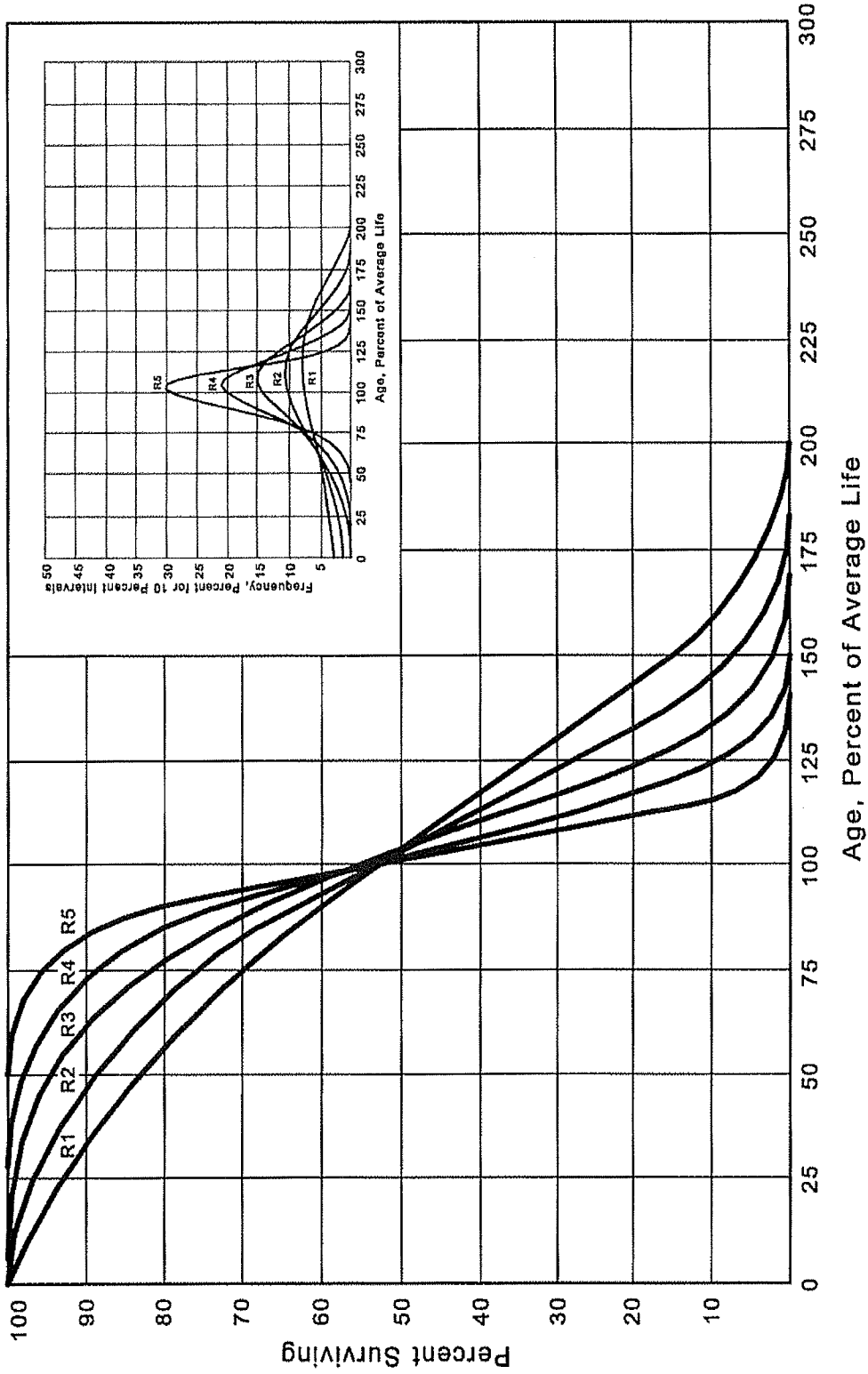


Figure 4. Right Modal or "R" Iowa Type Survivor Curves

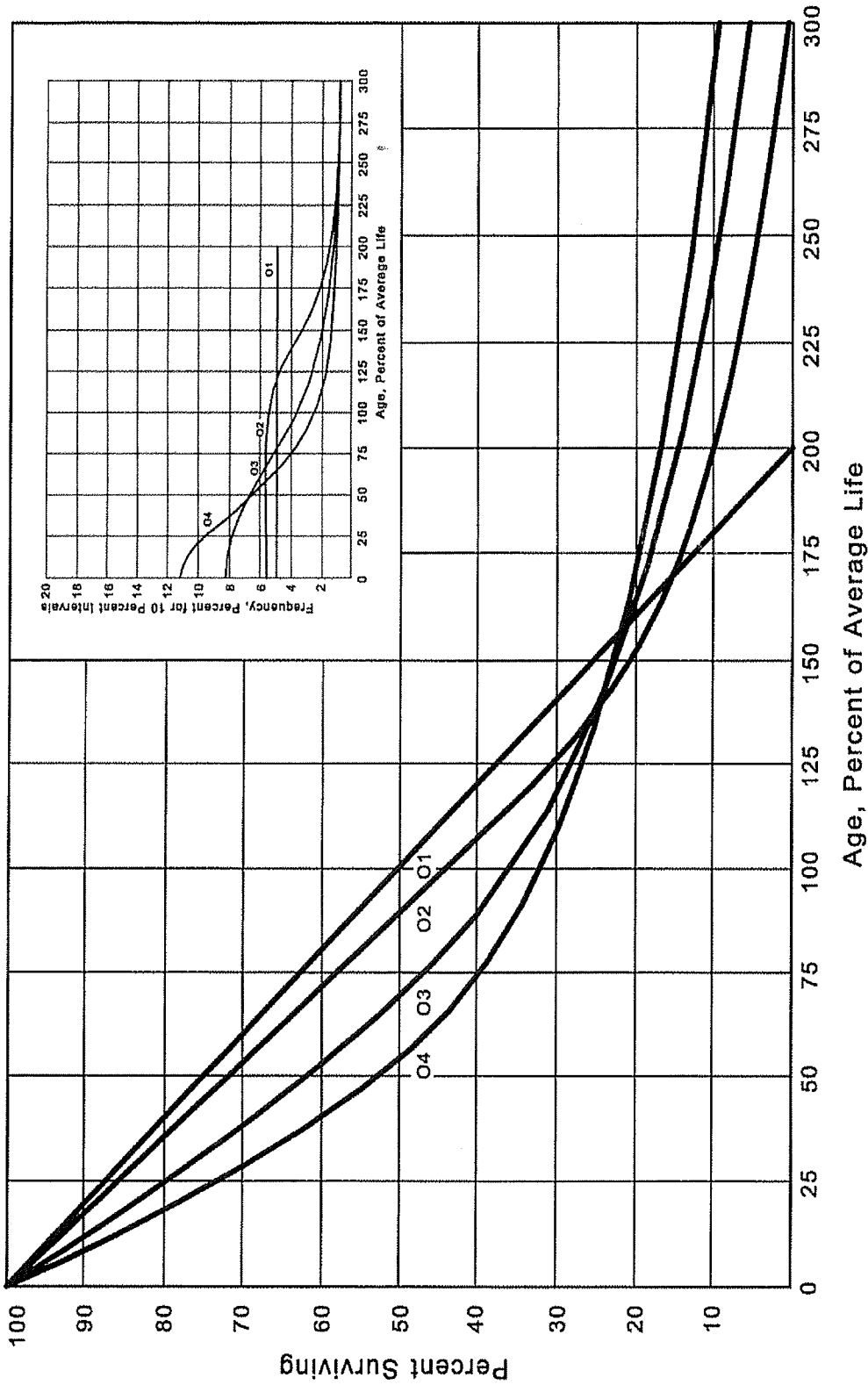


Figure 5. Origin Modal or "O" Iowa Type Survivor Curves

Experiment Station's Bulletin 125.¹ These curve types have also been presented in subsequent Experiment Station bulletins and in the text, "Engineering Valuation and Depreciation."² In 1957, Frank V. B. Couch, Jr., an Iowa State College graduate student submitted a thesis presenting his development of the fourth family consisting of the four O type survivor curves.

Survivor curves for groups in which all property is expected to be retired concurrently, such as power plants, are obtained by truncating smooth survivor curves at an age before zero percent surviving is reached. Such groups to which truncated survivor curves are applicable are designated as life span groups. In life span groups of one or more vintages, future retirements of all property included in the group are anticipated to occur at a specific date or over a restricted range of future dates which are represented by an estimated probable retirement date. Survivor curves for life span groups can be developed using both available historical experience and known or forecasted retirement dates. The life span of both the original installation and a subsequent addition is the number of years which elapse between its installation and the final retirement of the group. During the life of the group as a whole, interim retirements normally occur between age zero and the maximum age to produce a survivor pattern which is referred to as an "interim survivor curve".

Retirement Rate Method of Analysis

The retirement rate method is an actuarial method of deriving survivor curves using the average rates at which property of each age group is retired. The method relates to property groups for which aged accounting experience is available or for

¹ Winfrey, Robley. Statistical Analyses of Industrial Property Retirements. Iowa State College, Engineering Experiment Station, Bulletin 125. 1935.

²Marston, Anson, Robley Winfrey and Jean C. Hempstead. Engineering Valuation and Depreciation, 2nd Edition. New York, McGraw-Hill Book Company. 1953.

which aged accounting experience is developed by statistically aging unaged amounts and is the method used to develop the original stub survivor curves in this study. The method (also known as the annual rate method) is illustrated through the use of an example in the following text, and is also explained in several publications, including "Statistical Analyses of Industrial Property Retirements,"³ "Engineering Valuation and Depreciation,"⁴ and "Depreciation Systems."⁵

The average rate of retirement used in the calculation of the percent surviving for the survivor curve (life table) requires two sets of data: first, the property retired during a period of observation, identified by the property's age at retirement; and second, the property exposed to retirement at the beginning of the age intervals during the same period. The period of observation is referred to as the experience band, and the band of years which represent the installation dates of the property exposed to retirement during the experience band is referred to as the placement band. An example of the calculations used in the development of a life table follows. The example includes schedules of annual aged property transactions, a schedule of plant exposed to retirement, a life table and illustrations of smoothing the stub survivor curve.

Schedules of Annual Transactions in Plant Records.

The property group used to illustrate the retirement rate method is observed for the experience band 2006-2015 during which there were placements during the years 2001-2015. In order to illustrate the summation of the aged data by age interval, the data were compiled in the manner presented in Schedules 1 and 2 on pages II-12 and II-13. In Schedule 1, the year of installation (year placed) and the year of retirement

³Winfrey, Robley, Supra Note 1.

⁴Marston, Anson, Robley Winfrey, and Jean C. Hempstead, Supra Note 2.

⁵Wolf, Frank K. and W. Chester Fitch. Depreciation Systems. Iowa State University Press. 1994.

are shown. The age interval during which a retirement occurred is determined from this information. In the example which follows, \$10,000 of the dollars invested in 2001 were retired in 2006. The \$10,000 retirement occurred during the age interval between 4½ and 5½ years on the basis that approximately one-half of the amount of property was installed prior to and subsequent to July 1 of each year. That is, on the average, property installed during a year is placed in service at the midpoint of the year for the purpose of the analysis. All retirements also are stated as occurring at the midpoint of a one-year age interval of time, except the first age interval which encompasses only one-half year.

The total retirements occurring in each age interval in a band are determined by summing the amounts for each transaction year-installation year combination for that age interval. For example, the total of \$143,000 retired for age interval 4½-5½ is the sum of the retirements entered on Schedule 1 immediately above the stairstep line drawn on the table beginning with the 2006 retirements of 2001 installations and ending with the 2015 retirements of the 2010 installations. Thus, the total amount of 143 for age interval 4½-5½ equals the sum of:

$$10 + 12 + 13 + 11 + 13 + 13 + 15 + 17 + 19 + 20.$$

In Schedule 2, other transactions which affect the group are recorded in a similar manner. The entries illustrated include transfers and sales. The entries which are credits to the plant account are shown in parentheses. The items recorded on this schedule are not totaled with the retirements but are used in developing the exposures at the beginning of each age interval.

SCHEDULE 1. RETIREMENTS FOR EACH YEAR 2006-2015
SUMMARIZED BY AGE INTERVAL

Year Placed	Retirements, Thousands of Dollars										Total During		Age Interval (13)
	During Year										Age Interval (12)	Age Interval (11)	
	2006 (2)	2007 (3)	2008 (4)	2009 (5)	2010 (6)	2011 (7)	2012 (8)	2013 (9)	2014 (10)	2015 (11)			
2001	10	11	12	13	14	16	23	24	25	26	26	26	13½-14½
2002	11	12	13	15	16	18	20	21	22	19	44	44	12½-13½
2003	11	12	13	14	16	17	19	21	22	18	64	64	11½-12½
2004	8	9	10	11	11	13	14	15	16	17	83	83	10½-11½
2005	9	10	11	12	13	14	16	17	19	20	93	93	9½-10½
2006	4		10	11	12	13	14	15	16	20	105	105	8½-9½
2007		5	11	12	13	14	15	16	18	20	113	113	7½-8½
2008			6	12	13	15	16	17	19	19	124	124	6½-7½
2009				6	13	15	16	17	19	19	131	131	5½-6½
2010					7	14	16	17	19	20	143	143	4½-5½
2011						8	18	20	22	23	146	146	3½-4½
2012							9	20	22	25	150	150	2½-3½
2013								11	23	25	151	151	1½-2½
2014									11	24	153	153	½-1½
2015										13	80	80	0-½
Total	53	68	86	106	128	157	196	231	273	308	1,606		

Experience Band 2006-2015

Placement Band 2001-2015

**SCHEDULE 2. OTHER TRANSACTIONS FOR EACH YEAR 2006-2015
SUMMARIZED BY AGE INTERVAL**

Experience Band 2006-2015

Placement Band 2001-2015

Year Placed (1)	Acquisitions, Transfers and Sales, Thousands of Dollars										Total During Age Interval (12)	Age Interval (13)
	During Year											
(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
2001	-	-	-	-	-	60 ^a	-	-	-	-	-	13½-14½
2002	-	-	-	-	-	-	-	-	-	-	-	12½-13½
2003	-	-	-	-	-	-	-	-	-	-	-	11½-12½
2004	-	-	-	-	-	-	(5) ^b	-	-	60	-	10½-11½
2005	-	-	-	-	-	-	6 ^a	-	-	-	-	9½-10½
2006	-	-	-	-	-	-	-	-	-	(5)	-	8½-9½
2007	-	-	-	-	-	-	-	-	-	6	-	7½-8½
2008	-	-	-	-	-	-	-	-	-	-	-	6½-7½
2009	-	-	-	-	-	-	(12) ^b	-	-	-	-	5½-6½
2010	-	-	-	-	-	-	-	22 ^a	-	-	-	4½-5½
2011	-	-	-	-	-	-	(19) ^b	-	-	10	-	3½-4½
2012	-	-	-	-	-	-	-	-	-	-	-	2½-3½
2013	-	-	-	-	-	-	-	-	(102) ^c	-	-	1½-2½
2014	-	-	-	-	-	-	-	-	-	-	-	½-1½
2015	-	-	-	-	-	-	-	-	-	-	-	0-½
Total	-	-	-	-	-	60	(30)	22	(102)	(50)		

^a Transfer Affecting Exposures at Beginning of Year

^b Transfer Affecting Exposures at End of Year

^c Sale with Continued Use

Parentheses Denote Credit Amount.

Schedule of Plant Exposed to Retirement.

The development of the amount of plant exposed to retirement at the beginning of each age interval is illustrated in Schedule 3 on page II-15.

The surviving plant at the beginning of each year from 2006 through 2015 is recorded by year in the portion of the table headed "Annual Survivors at the Beginning of the Year". The last amount entered in each column is the amount of new plant added to the group during the year. The amounts entered in Schedule 3 for each successive year following the beginning balance or addition are obtained by adding or subtracting the net entries shown on Schedules 1 and 2. For the purpose of determining the plant exposed to retirement, transfers-in are considered as being exposed to retirement in this group at the beginning of the year in which they occurred, and the sales and transfers-out are considered to be removed from the plant exposed to retirement at the beginning of the following year. Thus, the amounts of plant shown at the beginning of each year are the amounts of plant from each placement year considered to be exposed to retirement at the beginning of each successive transaction year. For example, the exposures for the installation year 2011 are calculated in the following manner:

Exposures at age 0	=	amount of addition	=	\$750,000
Exposures at age ½	=	\$750,000- \$ 8,000	=	\$742,000
Exposures at age 1½	=	\$742,000- \$18,000	=	\$724,000
Exposures at age 2½	=	\$724,000- \$20,000 - \$19,000	=	\$685,000
Exposures at age 3½	=	\$685,000- \$22,000	=	\$663,000

For the entire experience band 2006-2015 the total exposures at the beginning of an age interval are obtained by summing diagonally in a manner similar to the summing of the retirements during an age interval (Schedule 1). For example, the figure of 3,789,

SCHEDULE 3. PLANT EXPOSED TO RETIREMENT
 JANUARY 1 OF EACH YEAR 2006-2015
 SUMMARIZED BY AGE INTERVAL

Year Placed	Exposures, Thousands of Dollars											Total at		Age Interval
	Annual Survivors at the Beginning of the Year											Beginning of		
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Age Interval	(12)	(13)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)		
2001	255	245	234	222	209	195	239	216	192	167	167	167	167	13½-14½
2002	279	268	256	243	228	212	194	174	153	131	323	323	323	12½-13½
2003	307	296	284	271	257	241	224	205	184	162	531	531	531	11½-12½
2004	338	330	321	311	300	289	276	262	242	226	823	823	823	10½-11½
2005	376	367	357	346	334	321	307	297	280	261	1,097	1,097	1,097	9½-10½
2006	420 ^a	416	407	397	386	374	361	347	332	316	1,503	1,503	1,503	8½-9½
2007		460 ^a	455	444	432	419	405	390	374	356	1,952	1,952	1,952	7½-8½
2008			510 ^a	504	492	479	464	448	431	412	2,463	2,463	2,463	6½-7½
2009				580 ^a	574	561	546	530	501	482	3,057	3,057	3,057	5½-6½
2010					660 ^a	653	639	623	628	609	3,789	3,789	3,789	4½-5½
2011						750 ^a	742	724	685	663	4,332	4,332	4,332	3½-4½
2012							850 ^a	841	821	799	4,955	4,955	4,955	2½-3½
2013								960 ^a	949	926	5,719	5,719	5,719	1½-2½
2014									1,080 ^a	1,069	6,579	6,579	6,579	½-1½
2015										1,220 ^a	7,490	7,490	7,490	0-½
Total	1,975	2,382	2,824	3,318	3,872	4,494	5,247	6,017	6,852	7,799	44,780	44,780	44,780	

^aAdditions during the year

shown as the total exposures at the beginning of age interval 4½-5½, is obtained by summing:

$$255 + 268 + 284 + 311 + 334 + 374 + 405 + 448 + 501 + 609.$$

Original Life Table

The original life table, illustrated in Schedule 4 on page II-17, is developed from the totals shown on the schedules of retirements and exposures, Schedules 1 and 3, respectively. The exposures at the beginning of the age interval are obtained from the corresponding age interval of the exposure schedule, and the retirements during the age interval are obtained from the corresponding age interval of the retirement schedule. The retirement ratio is the result of dividing the retirements during the age interval by the exposures at the beginning of the age interval. The percent surviving at the beginning of each age interval is derived from survivor ratios, each of which equals one minus the retirement ratio. The percent surviving is developed by starting with 100% at age zero and successively multiplying the percent surviving at the beginning of each interval by the survivor ratio, i.e., one minus the retirement ratio for that age interval.

The calculations necessary to determine the percent surviving at age 5½ are as follows:

Percent surviving at age 4½	=	88.15	
Exposures at age 4½	=	3,789,000	
Retirements from age 4½ to 5½	=	143,000	
Retirement Ratio	=	$143,000 \div 3,789,000$	= 0.0377
Survivor Ratio	=	$1.000 - 0.0377$	= 0.9623
Percent surviving at age 5½	=	$(88.15) \times (0.9623)$	= 84.83

**SCHEDULE 4. ORIGINAL LIFE TABLE
CALCULATED BY THE RETIREMENT RATE METHOD**

Experience Band 2006-2015

Placement Band 2001-2015

(Exposure and Retirement Amounts are in Thousands of Dollars)

Age at Beginning of <u>Interval</u> (1)	Exposures at Beginning of <u>Age Interval</u> (2)	Retirements During Age <u>Interval</u> (3)	Retirement <u>Ratio</u> (4)	Survivor <u>Ratio</u> (5)	Percent Surviving at Beginning of <u>Age Interval</u> (6)
0.0	7,490	80	0.0107	0.9893	100.00
0.5	6,579	153	0.0233	0.9767	98.93
1.5	5,719	151	0.0264	0.9736	96.62
2.5	4,955	150	0.0303	0.9697	94.07
3.5	4,332	146	0.0337	0.9663	91.22
4.5	3,789	143	0.0377	0.9623	88.15
5.5	3,057	131	0.0429	0.9571	84.83
6.5	2,463	124	0.0503	0.9497	81.19
7.5	1,952	113	0.0579	0.9421	77.11
8.5	1,503	105	0.0699	0.9301	72.65
9.5	1,097	93	0.0848	0.9152	67.57
10.5	823	83	0.1009	0.8991	61.84
11.5	531	64	0.1205	0.8795	55.60
12.5	323	44	0.1362	0.8638	48.90
13.5	167	26	0.1557	0.8443	42.24
14.5					35.66
Total	<u>44,780</u>	<u>1,606</u>			

Column 2 from Schedule 3, Column 12, Plant Exposed to Retirement.

Column 3 from Schedule 1, Column 12, Retirements for Each Year.

Column 4 = Column 3 divided by Column 2.

Column 5 = 1.0000 minus Column 4.

Column 6 = Column 5 multiplied by Column 6 as of the Preceding Age Interval.

The totals of the exposures and retirements (Columns 2 and 3) are shown for the purpose of checking with the respective totals in Schedules 1 and 3. The ratio of the total retirements to the total exposures, other than for each age interval, is meaningless.

The original survivor curve is plotted from the original life table (Column 6, Schedule 4). When the curve terminates at a percent surviving greater than zero, it is called a stub survivor curve. Survivor curves developed from retirement rate studies generally are stub curves.

Smoothing the Original Survivor Curve

The smoothing of the original survivor curve eliminates any irregularities and serves as the basis for the preliminary extrapolation to zero percent surviving of the original stub curve. Even if the original survivor curve is complete from 100% to zero percent, it is desirable to eliminate any irregularities, as there is still an extrapolation for the vintages which have not yet lived to the age at which the curve reaches zero percent. In this study, the smoothing of the original curve with established type curves was used to eliminate irregularities in the original curve.

The Iowa type curves are used in this study to smooth those original stub curves which are expressed as percents surviving at ages in years. Each original survivor curve was compared to the Iowa curves using visual and mathematical matching in order to determine the better fitting smooth curves. In Figures 6, 7, and 8, the original curve developed in Schedule 4 is compared with the L, S, and R Iowa type curves which most nearly fit the original survivor curve. In Figure 6, the L1 curve with an average life between 12 and 13 years appears to be the best fit. In Figure 7, the SO type curve with a 12-year average life appears to be the best fit and appears to be better than the L1 fitting. In Figure 8, the R1 type curve with a 12-year average life

appears to be the best fit and appears to be better than either the L1 or the SO. In Figure 9, the three fittings, 12-L1, 12-SO, and 12-R1 are drawn for comparison purposes. It is probable that the 12-R1 Iowa curve would be selected as the most representative of the plotted survivor characteristics of the group, assuming no contrary relevant factors external to the analysis of historical data.

FIGURE 6. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN L1 IOWA TYPE CURVE
ORIGINAL AND SMOOTH SURVIVOR CURVES

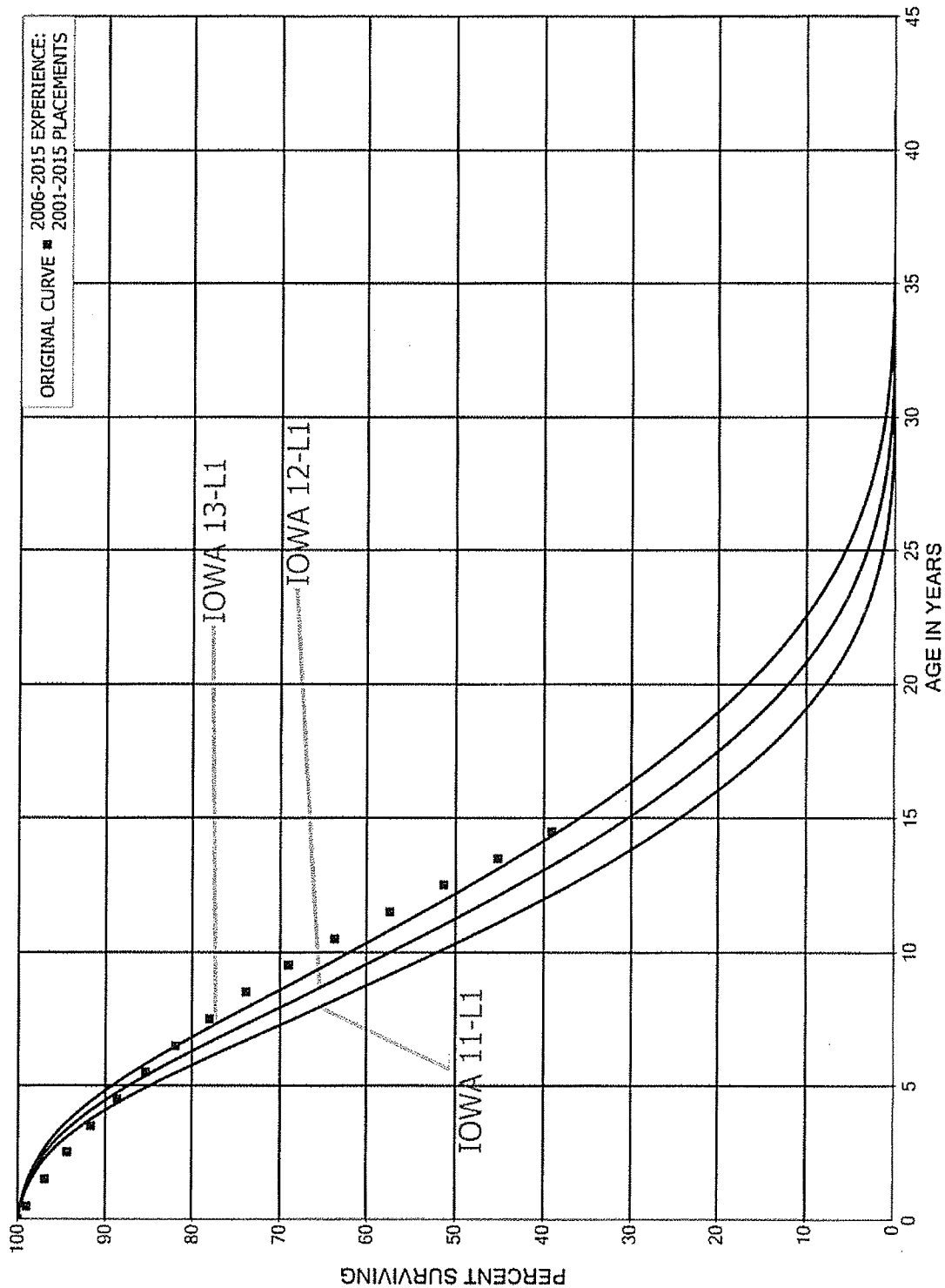


FIGURE 7. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN S0 IOWA TYPE CURVE
ORIGINAL AND SMOOTH SURVIVOR CURVES

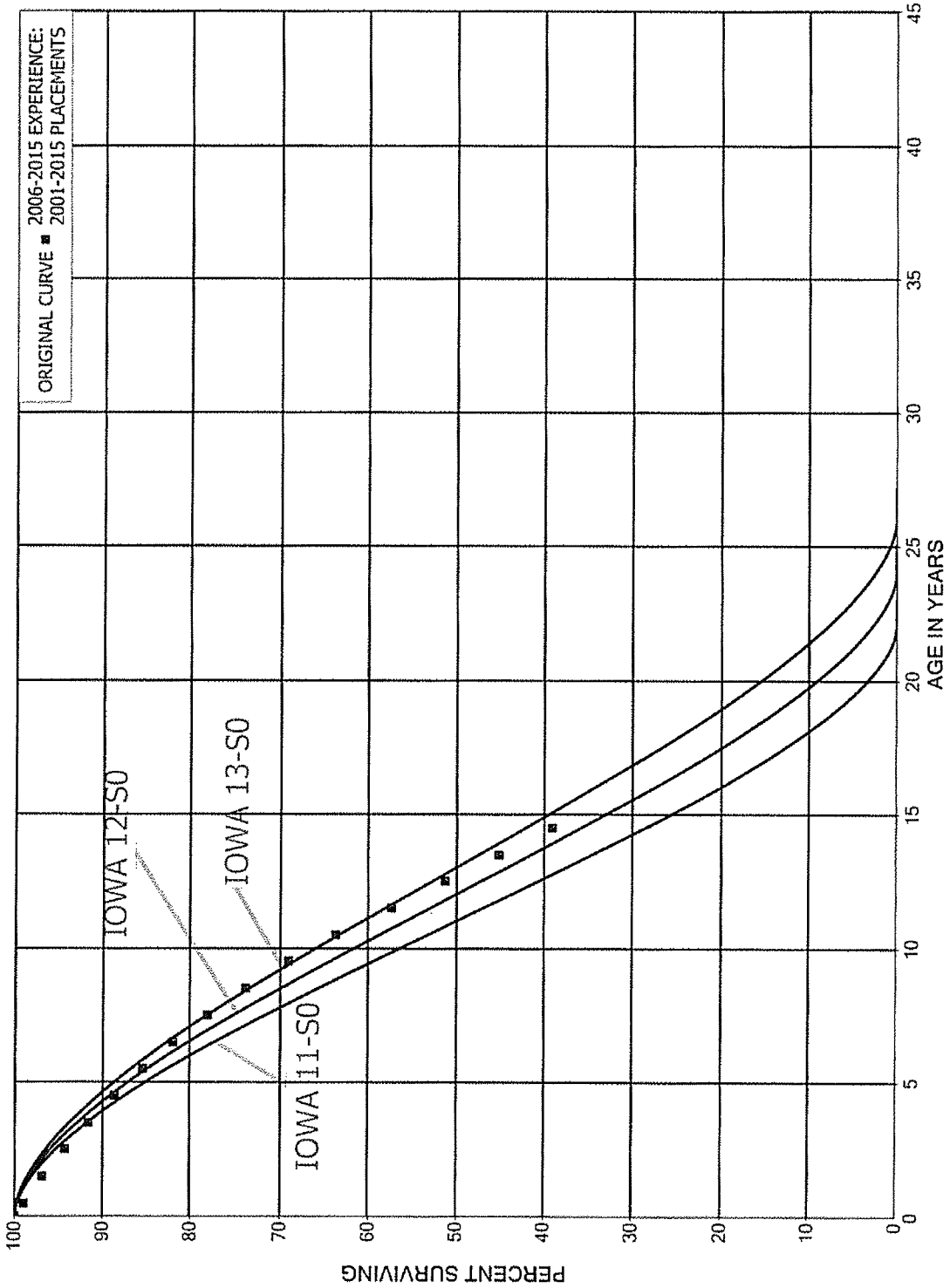


FIGURE 8. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN R1 IOWA TYPE CURVE ORIGINAL AND SMOOTH SURVIVOR CURVES

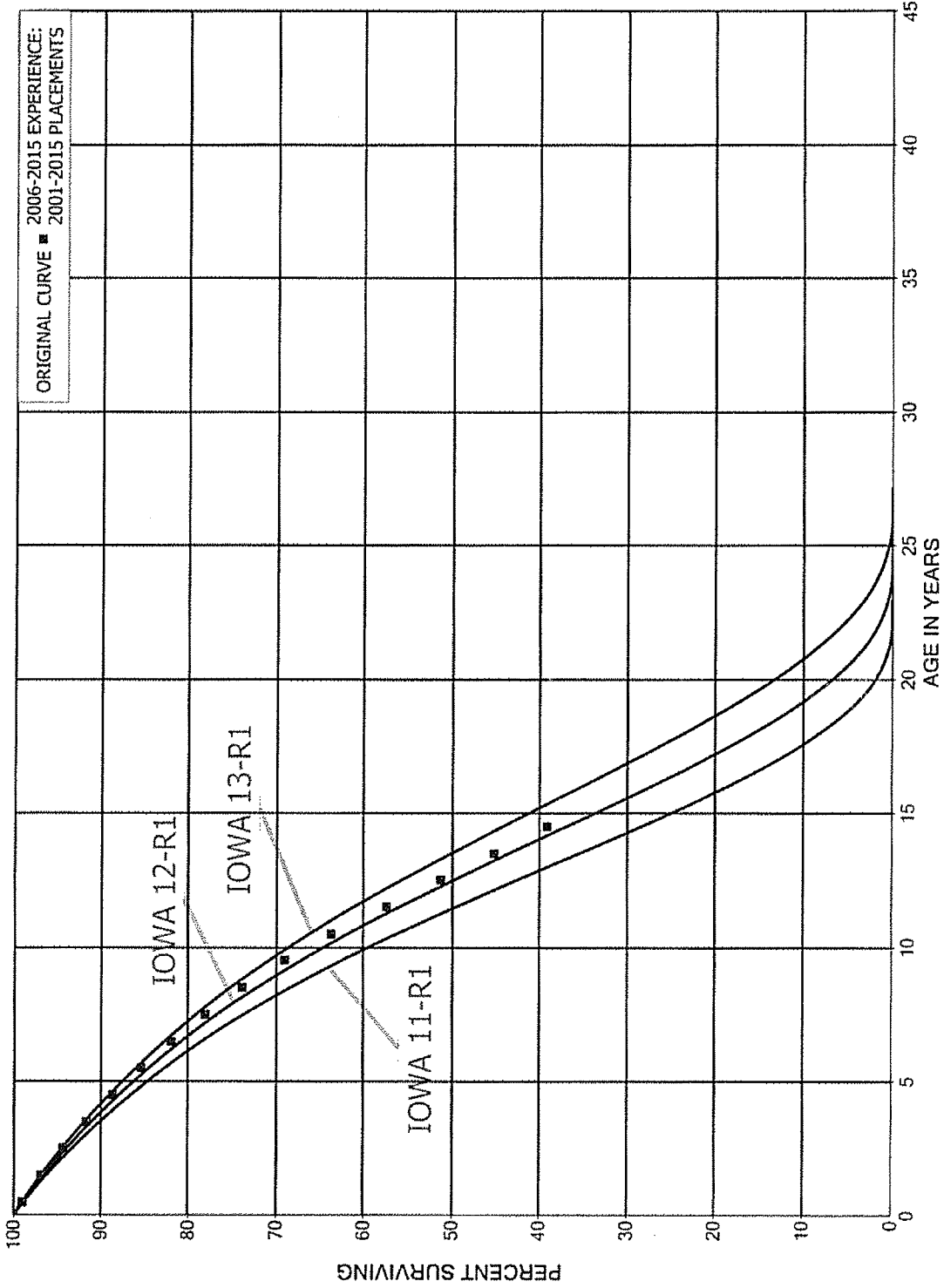
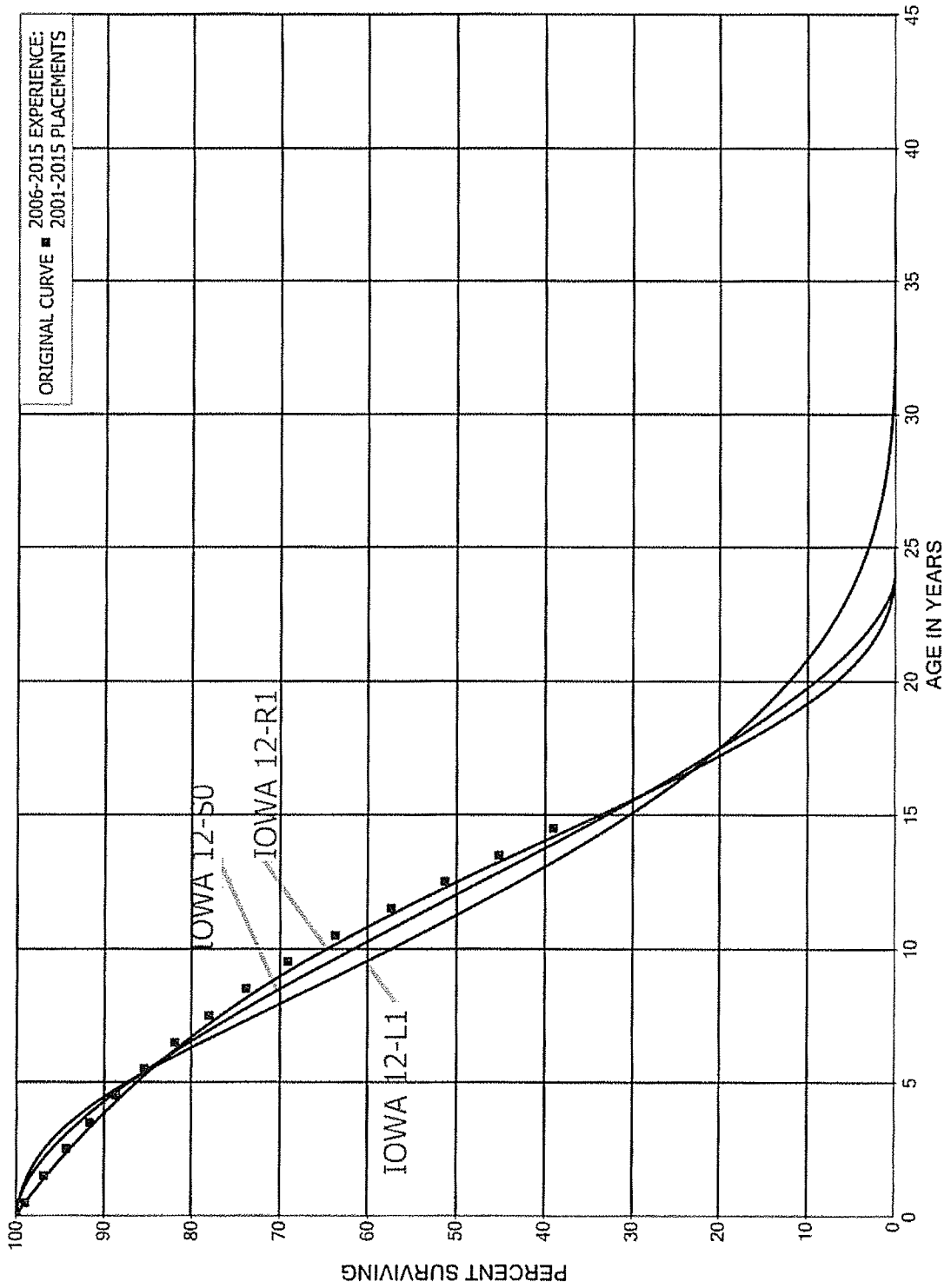


FIGURE 9. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN L1, S0 AND R1 IOWA TYPE CURVE ORIGINAL AND SMOOTH SURVIVOR CURVES



PART III. SERVICE LIFE CONSIDERATIONS

PART III. SERVICE LIFE CONSIDERATIONS

Judgment.

The survivor curve estimates were based on informed judgment which considered a number of factors. The primary factors were retirement rate analyses of historical service life data; current Company policies and outlook as determined during the discussions with management personnel; and the survivor curve estimates from previous depreciation studies for Pennsylvania Power Company and other electric companies.

The statistical analyses resulted in good to excellent indications of the survivor patterns experienced for most of the major accounts. The plant accounts or subaccounts for which the statistical analyses were significant factors in the judgments of the survivor curves are as follows:

<u>Account Number</u>	<u>Title</u>
Transmission Plant	
353	Station Equipment
355	Poles and Fixtures
Distribution Plant	
362	Station Equipment
364	Poles, Towers and Fixtures
365	Overhead Conductors and Devices
367	Underground Conductors and Devices
368	Line Transformers
370	Meters
373.1	Street Lighting and Signal Systems - Overhead and Underground Lines
373.2	Street Lighting and Signal Systems - ESIP
General Plant	
390.1	Structures and Improvements - Major
392	Transportation Equipment
396	Power Operated Equipment

Account 368 Line Transformers, is used to illustrate the manner in which the study was conducted for the groups in the preceding list. It is a significant account and serves as a typical illustration. Aged plant accounting data have been compiled for the years 1943 through 2014. These data were coded by type of transaction, year in which the transaction took place, and year in which the plant was placed in service. The data were analyzed by the retirement rate method to obtain an indication of the experienced service life characteristics.

The estimated Iowa 44-R1.5 survivor curve is based on the experience band, 1943 through 2014. The estimated survivor curve is an excellent fit of the observed data, has an average service life equal to the previous estimate for this account, and is within the typical range of lives used by other electric utilities.

For Account 364, Poles, Towers and Fixtures, the estimate of survivor characteristics is based on the 1943-2014 experience band. Most retirements have been due to upgrades to larger poles and wear and tear. Typical service lives for poles and fixtures range from 40 to 55 years. Most of the poles included in this account are wood poles which are subject to decay and ground rot. The continued pole treatment and lack of growth have minimized the retirement levels in the past. The Iowa 55-R2 survivor curve reflects the outlook of management, is at the upper end of the range of estimates used by other utilities, and is a reasonable interpretation of a significant portion of the survivor curve through age 77.

The estimate for Account 365, Overhead Conductors and Devices, 60-R1, is based on management's expectation of a longer life for overhead conductor primarily due to past historical indications and lack of load growth. Most of the remaining overhead conductor included in this account is aluminum with limited forces of

retirement. Management's expectation of retirements to be low in the next few years is reflected in the 60-year average service life.

Generally, the survivor curve estimates for the remainder of the accounts were based on engineering judgment, considering the nature of the plant and equipment, review of available historical retirement data and a general knowledge of the service lives for similar equipment in other electric companies.

**PART IV. CALCULATION OF ANNUAL AND
ACCRUED DEPRECIATION**

PART IV. CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION

Group Depreciation Procedures

A group procedure for depreciation is appropriate when considering more than a single item of property. Normally, the items within a group do not have identical service lives, but have lives that are dispersed over a range of time. There are two primary group procedures, namely, average service life and equal life group.

In the average service life procedure, the rate of annual depreciation is based on the average life or average remaining life of the group, and this rate is applied to the surviving balances of the group's cost. A characteristic of this procedure is that the cost of plant retired prior to average life is not fully recouped at the time of retirement, whereas the cost of plant retired subsequent to average life is more than fully recouped. Over the entire life cycle, the portion of cost not recouped prior to average life is balanced by the cost recouped subsequent to average life.

In the equal life group procedure, the property group is subdivided according to service life. That is, each equal life group includes that portion of the property which experiences the life of that specific group. The relative size of each equal life group is determined from the property's life dispersion curve. This procedure eliminates the need to base depreciation on average lives, inasmuch as each group is equivalent to a unit having a single life. The full costs of short-lived units are accrued during their lives, leaving no deferral of accruals required to be added to the annual costs associated with long-lived units. The calculated depreciation for the property group is the summation of the calculated depreciation based on the service life of each equal life group.

Remaining Life Annual Accruals

For the purpose of calculating remaining life accrual rates as of December 31, 2016, the estimated book depreciation reserve for each plant account is allocated among vintages in proportion to the calculated accrued depreciation for the account. Explanations of remaining life accruals and calculated accrued depreciation for the vintages calculated by the equal life group procedure follow. The detailed calculations are set forth in the Results of Study section of the report.

Average Service Life Procedure

In the average service life procedure, the remaining life annual accrual for each vintage is determined by dividing future book accruals (original cost less book reserve) by the average remaining life of the vintage. The average remaining life is a directly weighted average derived from the estimated future survivor curve in accordance with the average service life procedure.

The calculated accrued depreciation for each depreciable property group represents that portion of the depreciable cost of the group which would not be allocated to expense through future whole life depreciation accruals if current forecasts of life characteristics are used as the basis for such accruals. The accrued depreciation calculation consists of applying an appropriate ratio to the surviving original cost of each vintage of each account, based upon the attained age and service life. The straight line accrued depreciation ratios are calculated as follows for the average service life procedure:

$$\text{Ratio} = 1 - \frac{\text{Average Remaining Life Expectancy}}{\text{Average Service Life}}$$

Equal Life Group Procedure

In the equal life group procedure, the remaining life annual accrual for each vintage is determined by dividing future book accruals (original cost less book reserve) by the composite remaining life for the surviving original cost of that vintage. The composite remaining life is derived by compositing the individual equal life group remaining lives in accordance with the following equation:

$$\text{Composite Remaining Life} = \frac{\left(\frac{\text{Book Cost}}{\text{Life}} \times \text{Remaining Life} \right)}{\frac{\text{Book Cost}}{\text{Life}}}$$

The book costs and lives of the several equal life groups which are summed in the foregoing equation are defined by the estimated future survivor curve.

Inasmuch as book cost divided by life equals the whole life annual accrual, the foregoing equation reduces to the following form:

$$\text{Composite Remaining Life} = \frac{\sum \text{Whole Life Future Accruals}}{\sum \text{Whole Life Annual Accruals}}$$

or

$$\text{Composite Remaining Life} = \frac{\sum \text{Book Cost} - \text{Calc. Reserve}}{\sum \text{Whole Life Annual Accrual}}$$

The annual accrual rate for each account is equal to the sum of the remaining life annual accruals for all vintages divided by the account's total original cost. The account's "composite remaining life" is calculated by dividing the sum of the future book accruals for all vintages by the sum of the remaining life annual accruals for all vintages.

The calculated accrued depreciation in the equal life group procedure also represents that portion of depreciable cost which will not be allocated to expense through future accruals. However, the calculation is based at the equal life group level rather than the vintage group level, and does not require the use of averages. The equal life group accrued depreciation ratio is calculated as follows:

$$\text{Ratio} = \frac{\text{Remaining Life}}{\text{Average Service Life}}$$

Inasmuch as service life minus remaining life equals age, when averages are not employed, the foregoing equation reduces to:

$$\text{Ratio} = \frac{\text{Age}}{\text{Service Life}}$$

The table on the following page illustrates the procedure for calculating straight line equal life group accrued depreciation, using an Iowa 15-S0.5 survivor curve and a December 31, 2016 calculation date.

In the table, each equal life group is defined by the age interval shown in columns 1 and 2, which identify the ages at which the first and last retirement of each group occur. The group's designated life, shown in column 3, is the midpoint of the interval. In the calculation, the equal life groups of each vintage are arranged such that the midpoint of each one-year age interval coincides with the calculation date, e.g., December 31 in this case. This enables the calculation of annual accruals which are centered on, or as of, the same date as the calculation of accrued depreciation.

The retirement during each age interval, shown in column 4, is the size of each equal life group. It is derived from the Iowa 15-S0.5 survivor curve and is the difference between the percents surviving (not shown) at the beginning and end of the age interval.

DETAILED COMPUTATION OF ANNUAL AND ACCRUED FACTORS USING THE EQUAL LIFE GROUP PROCEDURE

INPUT PARAMETERS:
 CALCULATION DATE... 12-31-2016
 SURVIVOR CURVE.... 15-S0.5

AGE INTERVAL BEG (1)	END (2)	LIFE (3)	RETIREMENTS DURING INTERVAL (4)	GROUP ANNUAL ACCRUAL (5) = (4) / (3)	YEAR INST (6)	SUMMATION OF ANNUAL ACCRUALS (7)	AVERAGE PERCENT SURVIVING (8)	ANNUAL FACTOR (9)	ACCRUED FACTOR (10)
0.000	1.000	0.500	0.31537	0.31537000000	2016	9.39652967998	99.885006	0.0941	0.0471
1.000	2.000	1.500	0.81373	0.54248666667	2015	8.80991634664	99.277768	0.0887	0.1331
2.000	3.000	2.500	1.29944	0.51977600000	2014	8.27878501331	98.221182	0.0843	0.2108
3.000	4.000	3.500	1.79377	0.51250571429	2013	7.76264415616	96.674575	0.0803	0.2811
4.000	5.000	4.500	2.28286	0.50730222222	2012	7.25274018791	94.636258	0.0766	0.3447
5.000	6.000	5.500	2.76230	0.50223636364	2011	6.74797089498	92.113679	0.0733	0.4032
6.000	7.000	6.500	3.22505	0.49616153846	2010	6.24877194393	89.120006	0.0701	0.4557
7.000	8.000	7.500	3.65509	0.48734533333	2009	5.75701850803	85.679935	0.0672	0.5040
8.000	9.000	8.500	4.04995	0.47646470588	2008	5.27511348843	81.827414	0.0645	0.5483
9.000	10.000	9.500	4.40335	0.46351052632	2007	4.80512587233	77.600763	0.0619	0.5881
10.000	11.000	10.500	4.70385	0.44798571429	2006	4.34937775202	73.047163	0.0595	0.6248
11.000	12.000	11.500	4.95170	0.43058260870	2005	3.91009359053	68.219390	0.0573	0.6590
12.000	13.000	12.500	5.14181	0.41134480000	2004	3.48912988618	63.172637	0.0552	0.6900
13.000	14.000	13.500	5.26828	0.39024296296	2003	3.08833600470	57.967591	0.0533	0.7196
14.000	15.000	14.500	5.33345	0.36782413793	2002	2.70930245425	52.666725	0.0514	0.7453
15.000	16.000	15.500	5.33345	0.34409354839	2001	2.35334361109	47.333277	0.0497	0.7704
16.000	17.000	16.500	5.26828	0.31928969697	2000	2.02165198841	42.032413	0.0481	0.7937
17.000	18.000	17.500	5.14181	0.29381771429	1999	1.71509828278	36.827366	0.0466	0.8155
18.000	19.000	18.500	4.95169	0.26765891892	1998	1.43435996618	31.780614	0.0451	0.8344
19.000	20.000	19.500	4.70386	0.24122358974	1997	1.17991871185	26.952841	0.0438	0.8541
20.000	21.000	20.500	4.40334	0.21479707317	1996	0.95190838039	22.399242	0.0425	0.8713
21.000	22.000	21.500	4.04995	0.18836976744	1995	0.75032496009	18.172597	0.0413	0.8880
22.000	23.000	22.500	3.65509	0.16244844444	1994	0.57491585415	14.320074	0.0401	0.9023
23.000	24.000	23.500	3.22505	0.13723617021	1993	0.42507354682	10.880003	0.0391	0.9189
24.000	25.000	24.500	2.76230	0.11274693878	1992	0.30008199233	7.886332	0.0381	0.9335
25.000	26.000	25.500	2.28286	0.08952392157	1991	0.19894656215	5.363752	0.0371	0.9461
26.000	27.000	26.500	1.79378	0.06768981132	1990	0.12033969571	3.325431	0.0362	0.9593
27.000	28.000	27.500	1.29944	0.04725236364	1989	0.06286860823	1.778819	0.0353	0.9708
28.000	29.000	28.500	0.81372	0.02855157895	1988	0.02496663693	0.722238	0.0346	0.9861
29.000	30.000	29.500	0.31538	0.01069084746	1987	0.00534542373	0.157690	0.0339	1.0000
TOTAL			100.00000						

Each equal life group's whole life annual accrual, shown in column 5, equals the group's size (column 4) divided by its life (column 3), except that for the first age interval, the annual accrual is set equal to the group's size.

Columns 6 through 10 show the derivation of the whole life annual factor and accrued factor for each vintage based on the data developed in the first five columns. The year installed is shown in column 6. For all vintages other than the first year (2016), the summation of annual accruals for each year installed, shown in column 7, is calculated by adding one-half of the group annual accrual (column 5) for that vintage's

current age interval plus the group annual accruals for all succeeding age intervals. For example, the figure 8.80991634664 for 2015 equals one-half of 0.54248666667 plus all of the succeeding figures in column 5. Only one half of the annual accrual for the vintage's current age interval group is included in the summation because the equal life group for that interval expires at the midpoint of the current year.

The summation of annual accruals (column 7) for installations during 2016 is calculated on the basis of an in-service date at the midpoint of the year, i.e., June 30. Inasmuch as the overall calculation is centered on December 31, 2016, the first figure in column 7, for vintage 2016, equals the group annual accrual for 2016 plus one-half of the group annual accruals for each of the subsequent years.

The average percent surviving, derived from the Iowa 15-S0.5 survivor curve, is shown in column 8 for each age interval. The annual factor, shown in column 9, is the result of dividing the summation of annual accruals (column 7) by the average percent surviving (column 8).

The accrued depreciation factor, shown in column 10, equals the annual factor multiplied by the age of the group as of December 31, 2016.

CALCULATION OF ANNUAL AND ACCRUED AMORTIZATION

Amortization, as defined in the Uniform System of Accounts, is the gradual extinguishment of an amount in an account by distributing such amount over a fixed period, over the life of the asset or liability to which it applies, or over the period during which it is anticipated the benefit will be realized. Normally, the distribution of the amount is in equal amounts to each year of the amortization period.

The calculation of annual and accrued amortization requires the selection of an amortization period. The amortization periods used in this report were based on judgment which incorporated a consideration of the period during which the assets will render most of their service, the amortization periods and service lives used by other utilities, and the service life estimates previously used for the asset under depreciation accounting.

Amortization accounting is appropriate for certain General Plant accounts that represent numerous units of property, but a very small portion of depreciable electric plant in service. The accounts and their amortization periods are as follows:

<u>Account</u>	<u>Amortization Period, Years</u>
391, Office Furniture and Equipment	
Furniture and Equipment	20
Data Processing Equipment	5
Data Processing Equipment - Smart Grid	5
393, Stores Equipment	30
394, Tools, Shop and Garage Equipment	25
395, Laboratory Equipment	20
397, Communication Equipment	15
398, Miscellaneous Equipment	20

For the purpose of calculating annual amortization amounts as of December 31, 2016, the book depreciation reserve for each plant account or subaccount is assigned or allocated to vintages. The book reserve assigned to vintages with an age greater than the amortization period is equal to the vintage's original cost. The remaining book reserve is allocated among vintages with an age less than the amortization period in proportion to the calculated accrued amortization. The calculated accrued amortization is equal to the original cost multiplied by the ratio of the vintage's age to its amortization

period. The annual amortization amount is determined by dividing the future amortizations (original cost less allocated book reserve) by the remaining period of amortization for the vintage.

AMORTIZATION OF NET SALVAGE

Experienced and estimated net salvage is incorporated in the results of the study, as it was reported on the Company's books and records for the period January 1, 2012 through December 31, 2016. Results of the calculations are shown in Table 4.

Net salvage experienced during the five-year period is presented in this manner to determine the amount of negative net salvage to be amortized for book purposes. In developing the amount to be amortized, the data for the accounts which experienced positive net salvage have been netted with those for accounts which experienced negative net salvage.

In order to be consistent with this manner of recognizing salvage, no adjustments for salvage were made to the annual accruals and accrued depreciation calculated for each individual account. There were no exclusions from the 2012 through 2016 net salvage accrual.

PART V. RESULTS OF STUDY

PART V. RESULTS OF STUDY

DESCRIPTION OF SUMMARY TABULATIONS

Tables 1 through 4 presented on pages V-4 through V-9 summarize the results of the depreciation study as of December 31, 2016. Table 1 sets forth, by depreciable group, the estimated survivor curve, original cost, book depreciation reserve as of December 31, 2016, future book accruals, calculated annual accrual amount and rate, and composite remaining life for plant in service. Table 2 presents the bringforward of the book reserve to December 31, 2016. Table 3 sets forth the calculation of the depreciation accruals for the twelve months ended December 31, 2016. Table 4 presents the annual amortization of experienced and estimated net salvage based on the period 2012 through 2016.

DESCRIPTION OF DETAILED TABULATIONS

Supporting statistical data for the estimates of average service lives and survivor curves, the annual depreciation calculations, and salvage and cost of removal for the years 2012-2016 are presented in three sections.

The section beginning on page VI-2 sets forth, for each depreciable group analyzed by the retirement rate method, a chart depicting the original and estimated survivor curves followed by a tabular presentation of the original life table(s) plotted on the chart. A cumulative summary, by year installed, for electric plant and the supporting data for the original cost depreciation calculations are presented in the section beginning on page VII-3. The tabulations of experienced and estimated net salvage by

year by account for the five-year period, 2012-2016, are presented in the section beginning on page VIII-2.

In the first section, the survivor curves estimated for the depreciable groups are shown as dark smooth curves on the charts. Each smooth survivor curve is denoted by a numeral followed by the type curve designation. The numeral used is the average life derived from the entire curve from 100 percent to zero percent surviving. In cases where only a segment of the estimated curve is used in the depreciation calculation, the numeral used for identification purposes is not a designation of the average life of the group. The titles of the charts indicate the group, the symbol used to plot the points of the original life table, and the experience and placement bands of the life tables which were plotted. The experience band indicates the range of years for which the retirements were used to develop the stub survivor curve. The placements indicate, for the related experience band, the range of years of installations which appear in the experience.

The tables of the calculated annual depreciation related to original cost are presented in the second section and indicate the estimated average survivor curves used in the calculations. The tables set forth, for each installation year, the original cost, calculated accrued depreciation, allocated book reserve, future book accruals, remaining life expectancy and the calculated annual accrual.

Detailed tabulations setting forth the cost of removal and salvage amounts, by plant account for each year, are presented beginning on page VIII-2. The total salvage and removal costs, by year, were used to calculate the five-year net salvage amortization presented in Table 4 on page V-9.

PENNSYLVANIA POWER COMPANY

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO ELECTRIC PLANT AS OF DECEMBER 31, 2016

	ACCOUNT (1)	SURVIVOR CURVE (2)	ORIGINAL COST (3)	BOOK DEPRECIATION RESERVE (4)	FUTURE ACCRUALS (5)	CALCULATED ANNUAL ACCRUAL AMOUNT (6)	CALCULATED ANNUAL ACCRUAL RATE (7)=(6)/(3)	COMPOSITE REMAINING LIFE (8)=(5)/(6)
ELECTRIC PLANT								
	INTANGIBLE PLANT							
303	MISCELLANEOUS INTANGIBLE PLANT	7-SQ	12,119,673.24	9,647,740	2,471,933	629,973	5.20	3.9
303.1	MISCELLANEOUS INTANGIBLE PLANT - SMART METER SOFTWARE	7-SQ	4,059,335.81	698,001	3,391,336	600,711	14.69	5.6
	TOTAL INTANGIBLE PLANT		16,209,010.05	10,345,741	5,863,269	1,230,684	7.59	
	TRANSMISSION PLANT							
352.1	STRUCTURES AND IMPROVEMENTS	65-R4	754,597.96	528,270	236,328	6,132	0.80	38.5
352.2	STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	65-R4	195,215.93	105,041	90,175	2,644	1.35	34.1
353	STATION EQUIPMENT	58-R2	6,417,733.76	4,689,714	1,728,020	52,916	0.82	32.9
354	TOWERS AND FIXTURES	70-R4	7,576.69	7,529	47	5	0.07	9.4
355	POLES AND FIXTURES	62-R1.5	2,825,552.87	892,544	1,933,009	52,682	1.85	36.7
356	OVERHEAD CONDUCTORS AND DEVICES	62-R2	2,722,010.42	858,486	1,763,544	43,831	1.61	40.2
357	UNDERGROUND CONDUIT	48-S2.5	64,653.86	54,742	9,912	1,009	1.55	9.8
358	UNDERGROUND CONDUCTORS AND DEVICES	40-S1.5	36,071.32	29,751	6,320	618	1.71	10.2
359	ROADS AND TRAILS	55-S2.5	6,324.44	5,119	1,205	77	1.22	15.6
	TOTAL TRANSMISSION PLANT		13,039,736.67	7,271,176	5,768,560	159,516	1.22	
	DISTRIBUTION PLANT							
361.1	STRUCTURES AND IMPROVEMENTS	65-R3	1,297,037.49	554,152	742,885	18,684	1.28	44.6
361.2	STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	65-R3	448,648.71	202,121	246,528	6,178	1.38	39.9
362	STATION EQUIPMENT	50-R0.5	52,599,689.64	14,463,796	38,046,092	1,418,110	2.70	26.8
364	POLES, TOWERS AND FIXTURES	55-R2	110,824,665.61	32,854,720	77,969,946	2,409,547	2.17	32.4
365	OVERHEAD CONDUCTORS AND DEVICES	60-R1	116,208,289.81	24,137,760	92,070,510	2,733,933	2.35	33.7
365.1	OVERHEAD CONDUCTORS AND DEVICES - CLEARING AND GRADING	60-R1	48,591,447.12	6,001,167	42,590,280	1,183,231	2.44	36.0
366	UNDERGROUND CONDUIT	60-R2.5	7,645,677.04	2,398,624	5,247,053	143,075	1.87	36.7
367	UNDERGROUND CONDUCTORS AND DEVICES	50-R2.5	66,219,918.64	20,835,527	45,384,392	1,454,515	2.20	31.2
368	LINE TRANSFORMERS	44-R1.5	107,670,422.55	34,173,670	73,696,802	2,806,284	2.69	25.4
369	METERS - SMART GRID	55-R4	38,808,793.47	19,527,568	19,281,225	518,062	1.33	37.2
370.1	INSTALLATIONS ON CUSTOMERS' PREMISES	15-S0.5	56,175,333.29	4,172,215	32,003,118	3,271,990	9.04	9.8
371	STREET LIGHTING AND SIGNAL SYSTEMS	33-R2	3,792,737.69	2,537,778	1,254,960	81,330	2.14	15.4
373.1	STREET LIGHTING AND SIGNAL SYSTEMS - ESIP	27-R2	7,690,683.12	4,354,501	3,336,182	238,355	3.07	14.1
373.2	STREET LIGHTING AND SIGNAL SYSTEMS - ESIP	27-R2	24,699.70	12,276	12,724	680	2.72	18.7
	TOTAL DISTRIBUTION PLANT		598,108,543.78	166,225,847	431,882,698	16,379,964	2.74	

PENNSYLVANIA POWER COMPANY

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO ELECTRIC PLANT AS OF DECEMBER 31, 2016

	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)=(5)/(6)
	ACCOUNT	SURVIVOR	ORIGINAL	BOOK	FUTURE	CALCULATED ANNUAL		COMPOSITE
	(1)	CURVE	COST	DEPRECIATION	ACCRUALS	ACCURUAL	ACCURUAL	REMAINING
		(2)	(3)	RESERVE	(5)	AMOUNT	RATE	LIFE
	GENERAL PLANT							
390.1	STRUCTURES AND IMPROVEMENTS	50-R2.5	6,152,243.39	2,924,083	3,226,160	113,354	1.84	28.5
390.2	STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	50-R2.5	41,299.15	8,682	32,617	928	2.25	35.1
391.1	OFFICE FURNITURE AND EQUIPMENT	20-SQ	391,650.44	303,892	87,768	60,963	45.57	1.4
391.2	DATA PROCESSING EQUIPMENT	5-SQ	1,157,387.31	872,137	285,250	110,455	9.54	2.5
391.25	DATA PROCESSING EQUIPMENT - SMART GRID	5-SQ	3,167,935.51	979,710	2,194,226	613,727	19.37	3.6
392	TRANSPORTATION EQUIPMENT	10-L2	594,877.72	219,467	375,391	87,672	11.38	5.5
393	STORES EQUIPMENT	30-SQ	124,327.24	69,790	54,537	10,939	8.60	5.0
394	TOOLS, SHOP AND GARAGE EQUIPMENT	25-SQ	1,957,965.48	518,553	1,439,415	180,846	9.24	8.0
395	LABORATORY EQUIPMENT	20-SQ	29,574.06	12,587	16,987	1,475	4.99	11.5
396	POWER OPERATED EQUIPMENT	18-S1.5	461,035.33	216,813	244,222	27,075	5.87	9.0
397	COMMUNICATION EQUIPMENT	15-SQ	2,123,962.23	166,789	1,957,173	210,613	9.82	9.3
398	MISCELLANEOUS EQUIPMENT	20-SQ	33,765.98	25,331	8,435	582	1.72	14.5
	TOTAL GENERAL PLANT		16,236,036.84	6,311,854	9,924,181	1,388,642	8.61	
	TOTAL DEPRECIABLE PLANT		643,593,327.34	190,154,618	453,438,709	19,168,806	2.98	
	NONDEPRECIABLE							
301	ORGANIZATION		22,633.53					
302	FRANCHISES AND CONSENTS		68,665.97	772				
350.1	LAND		2,899,804.27					
350.2	EASEMENTS		8,430,107.46					
360.1	LAND		578,456.76					
360.2	EASEMENTS		5,802,870.46					
374	DISTRIBUTION PLANT ARO		4,407.74	2,352				
389.1	LAND		228,639.25					
389.2	EASEMENTS		310.93					
399.1	GENERAL PLANT ARO		32,675.01	21,479				
	TOTAL NONDEPRECIABLE PLANT		17,256,971.38	24,603				
	TOTAL ELECTRIC PLANT		660,850,298.72	190,179,221	453,438,709	19,168,806		

* Indicates the use of an interim survivor curve and December 2020 retirement date.

PENNSYLVANIA POWER COMPANY

TABLE 2. BRINGS FORWARD TO DECEMBER 31, 2016, OF THE BOOK RESERVE AS OF DECEMBER 31, 2015

ACCOUNT (1)	BOOK RESERVE AS OF DECEMBER 31, 2015 (2)	DEPRECIATION ACCRUALS (3)	AMORTIZATION OF NET SALVAGE (4)	PROJECTED RETIREMENTS (5)	PROJECTED GROSS SALVAGE (6)	PROJECTED COST OF REMOVAL (7)	ACQUISITIONS (8)	ADJUSTMENTS (9)	RESERVE AT END OF PERIOD (10)	BOOK RESERVE AS A PERCENT OF ORIGINAL COST (11)
DEPRECIABLE PLANT										
303.00	9,014,763	632,977							9,647,740	79.60
303.10	181,335	516,666							698,001	17.07
352.10	521,767	6,193	310						528,270	69.09
352.20	102,386	2,655							105,041	53.81
353.00	4,625,924	53,909	9,881						4,689,714	73.07
354.00	7,524	5							7,529	99.38
355.00	890,609	49,854	12,673	15,820		44,772			892,544	31.59
356.00	907,380	45,730	5,356						958,466	35.21
357.00	53,669	1,073							54,742	84.67
358.00	29,095	656							29,751	82.48
359.00	5,040	79							5,119	80.94
361.10	539,671	16,487		2,006					554,152	42.72
361.20	195,865	6,236							202,121	46.05
362.00	13,149,461	1,471,311	139,007	196,654	8,704	98,327			14,463,798	27.54
364.00	33,057,699	2,245,063	569,726	870,421		2,176,051			32,854,720	29.65
365.00	23,093,526	2,534,741	742,420	1,226,872		1,006,035			24,137,780	20.77
365.10	4,737,769	1,263,378							6,001,167	12.35
366.00	2,263,193	143,943	316	6,588		2,240			2,398,624	31.37
367.00	20,338,558	1,377,368	130,656	479,173		531,882			20,835,527	31.46
368.00	31,687,458	2,657,353	262,048	545,118		98,121			34,173,620	31.68
369.00	19,152,873	593,312	130,061	86,226		172,452			19,527,568	50.32
370.10	1,127,985	3,043,529	791						4,172,215	11.53
371.00	2,443,141	85,337	9,300						2,537,778	66.91
373.10	4,050,257	252,570	62,545	8,236		2,635			4,354,501	56.62
373.20	3,690	1,162	7,424						12,276	49.10
390.10	2,884,153	103,505	2,743	60,289		6,029			2,924,083	67.54
390.20	7,740	942							8,682	67.54
391.10	585,872	66,252		348,232					303,892	77.59
391.20	1,265,574	335,070	5,578	734,085					872,137	75.35
391.25	434,082	539,628							973,710	30.74
392.00	144,048	76,501	(1,062)						219,487	36.90
393.00	108,057	9,149							69,790	56.13
394.00	785,493	208,134		47,416					518,553	26.48
395.00	53,514	2,466		475,074					12,587	42.56
396.00	188,459	28,354		43,394					216,013	47.03
397.00	113,298	337,224		283,733					166,789	7.85
398.00	47,702	7,653		30,024					25,331	75.02
TOTAL DEPRECIABLE PLANT	178,798,670	18,636,465	2,108,663	5,459,360	8,704	4,138,544	0	0	190,154,618	

PENNSYLVANIA POWER COMPANY

TABLE 2. BRINGFORWARD TO DECEMBER 31, 2016, OF THE BOOK RESERVE AS OF DECEMBER 31, 2015

ACCOUNT (1)	BOOK RESERVE AS OF DECEMBER 31, 2015 (2)	DEPRECIATION ACCRUALS (3)	AMORTIZATION OF NET SALVAGE (4)	PROJECTED RETIREMENTS (5)	PROJECTED GROSS SALVAGE (6)	PROJECTED COST OF REMOVAL (7)	ACQUISITIONS (8)	ADJUSTMENTS (9)	RESERVE AT END OF PERIOD (10)	BOOK RESERVE AS A PERCENT OF ORIGINAL COST (11)
NONDEPRECIABLE PLANT										
	772								772	1.12
	374.00								2,352	53.36
	399.10								21,479	65.34
TOTAL NONDEPRECIABLE PLA	24,603	0	0	0	0	0	0	0	24,603	
TOTAL	178,823,273	18,836,465	2,108,683	5,459,360	8,704	4,138,544	0	0	190,179,221	

PENNSYLVANIA POWER COMPANY

TABLE 3. CALCULATION OF DEPRECIATION ACCRUALS FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

DEPRECIABLE GROUP		ORIGINAL COST AS OF DECEMBER 31, 2015	ORIGINAL COST AS OF DECEMBER 31, 2016	COMPOSITE ACCRUAL RATE	ANNUAL ACCRUAL AMOUNT
(1)		(2)	(3)	(4)	(5)
DEPRECIABLE PLANT					
INTANGIBLE PLANT					
303	MISCELLANEOUS INTANGIBLE PLANT	11,721,276	12,119,673	5.31	632,977
303.1	MISCELLANEOUS INTANGIBLE PLANT - SMART METER SOFTWARE	2,831,841	4,089,337	14.93	516,666
TOTAL INTANGIBLE PLANT		14,553,117	16,209,010	7.19	1,149,643
TRANSMISSION PLANT					
352.1	STRUCTURES AND IMPROVEMENTS	764,598	764,598	0.81	6,193
352.2	STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	195,215.93	195,216	1.36	2,655
353	STATION EQUIPMENT	6,417,734	6,417,734	0.84	53,909
354	TOWERS AND FIXTURES	7,576	7,576	0.07	5
355	POLES AND FIXTURES	2,683,169	2,825,553	1.81	49,854
356	OVERHEAD CONDUCTORS AND DEVICES	2,722,010	2,722,010	1.68	45,730
357	UNDERGROUND CONDUIT	64,654	64,654	1.66	1,073
358	UNDERGROUND CONDUCTORS AND DEVICES	36,071	36,071	1.82	656
359	ROADS AND TRAILS	6,324	6,324	1.25	79
TOTAL TRANSMISSION PLANT		12,897,353	13,039,737	1.23	160,154
DISTRIBUTION PLANT					
361.1	STRUCTURES AND IMPROVEMENTS	1,278,980	1,297,037	1.28	16,487
361.2	STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	448,649	448,649	1.39	6,236
362	STATION EQUIPMENT	50,740,001	52,509,890	2.85	1,471,311
364	POLES, TOWERS AND FIXTURES	102,990,881	110,824,666	2.10	2,245,063
365	OVERHEAD CONDUCTORS AND DEVICES	105,166,441	116,208,290	2.29	2,534,741
365.1	OVERHEAD CONDUCTORS AND DEVICES - CLEARING AND GRADING	48,591,447	48,591,447	2.60	1,263,378
366	UNDERGROUND CONDUIT	7,586,389	7,645,677	1.89	143,943
367	UNDERGROUND CONDUCTORS AND DEVICES	61,907,364	66,219,919	2.15	1,377,368
368	LINE TRANSFORMERS	102,964,358	107,870,423	2.72	2,867,353
369	SERVICES	38,032,759	38,808,793	1.31	503,312
370.1	METERS - SMART GRID	27,496,827	36,175,333	9.56	3,043,529
371	INSTALLATIONS ON CUSTOMERS' PREMISES	3,792,738	3,792,738	2.25	85,337
373.1	STREET LIGHTING AND SIGNAL SYSTEMS	7,616,561	7,690,683	3.30	252,570
373.2	STREET LIGHTING AND SIGNAL SYSTEMS - ESIP	25,000	25,000	4.65	1,162
TOTAL DISTRIBUTION PLANT		558,638,394	598,108,544	2.69	15,811,790
GENERAL PLANT					
390.1	STRUCTURES AND IMPROVEMENTS	5,609,543	6,152,243	1.76	103,505
390.2	STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	41,289	41,289	2.28	942
391.1	OFFICE FURNITURE AND EQUIPMENT	739,893	391,660	11.71	66,252
391.2	DATA PROCESSING EQUIPMENT	1,891,473	1,157,387	21.98	335,070
391.25	DATA PROCESSING EQUIPMENT - SMART GRID	2,482,617	3,167,936	19.10	539,628
392	TRANSPORTATION EQUIPMENT	594,878	594,878	12.86	76,501
393	STORES EQUIPMENT	171,743	124,327	6.18	9,149
394	TOOLS, SHOP AND GARAGE EQUIPMENT	2,433,042	1,957,968	9.48	208,134
395	LABORATORY EQUIPMENT	72,968	29,574	4.81	2,466
396	POWER OPERATED EQUIPMENT	461,035	461,035	6.15	28,354
397	COMMUNICATION EQUIPMENT	2,125,868	2,123,962	15.87	337,224
398	MISCELLANEOUS EQUIPMENT	63,790	33,766	15.69	7,653
TOTAL GENERAL PLANT		16,688,247	16,236,037	10.63	1,714,878
SUBTOTAL DEPRECIABLE PLANT		602,777,111	643,593,327	2.99	18,836,465
NONDEPRECIABLE PLANT					
301	ORGANIZATION	22,834	22,834	-	0
302	FRANCHISES AND CONSENTS	68,666	68,666	-	0
350.1	LAND	2,089,804	2,089,804	-	0
350.2	EASEMENTS	8,430,107	8,430,107	-	0
360.1	LAND	578,457	578,457	-	0
360.2	EASEMENTS	5,802,870	5,802,870	-	0
374	DISTRIBUTION PLANT ARO	4,408	4,408	-	0
389.1	LAND	226,639	226,639	-	0
389.2	EASEMENTS	311	311	-	0
399.1	GENERAL PLANT ARO	32,875	32,875	-	0
SUBTOTAL NONDEPRECIABLE PLANT		17,256,971	17,256,971		0
TOTAL GAS PLANT		620,034,082	660,850,299		18,836,465

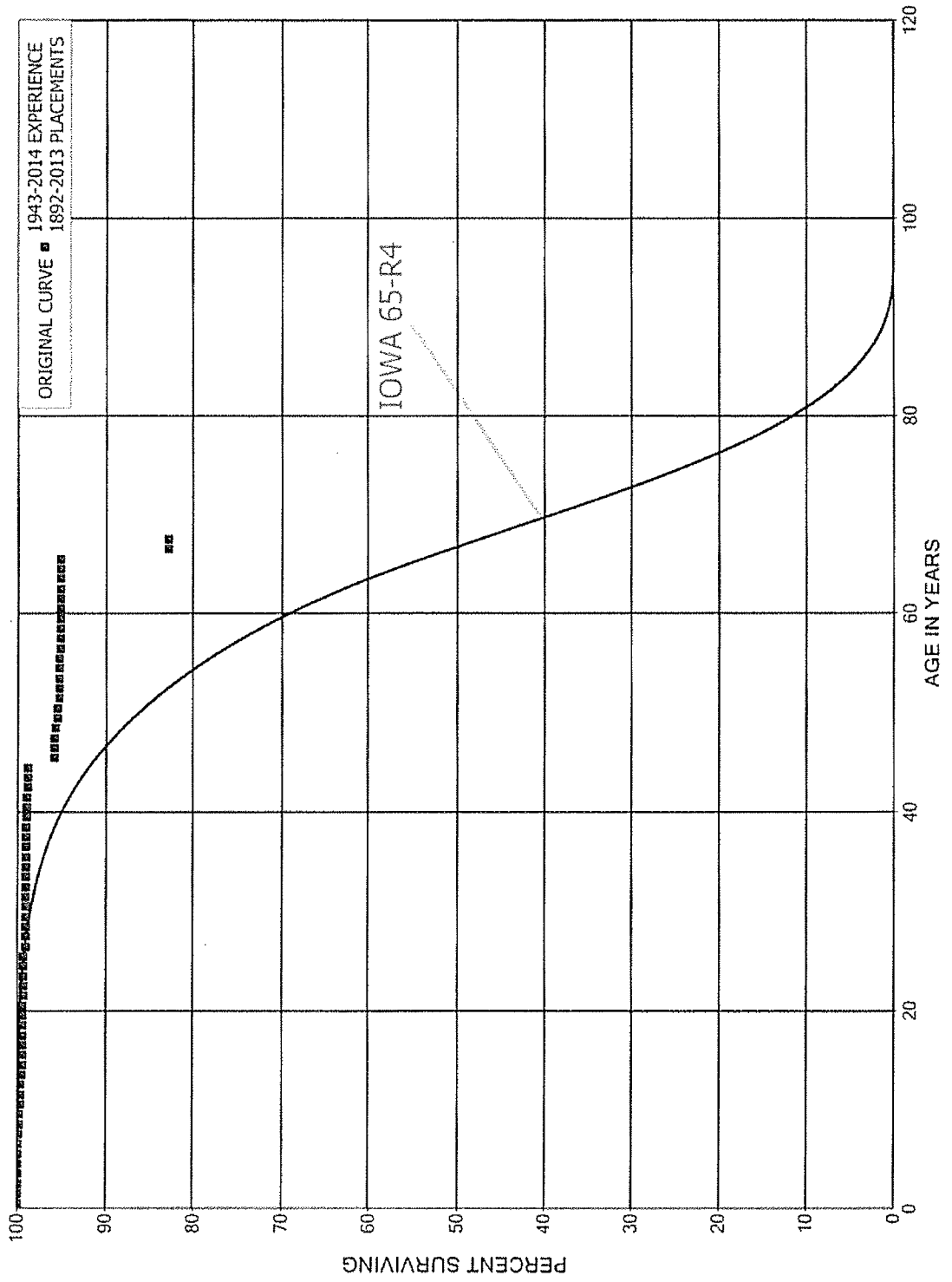
PENNSYLVANIA POWER COMPANY

TABLE 4. AMORTIZATION OF EXPERIENCED AND ESTIMATED NET SALVAGE

Account (1)	2012		2013		2014		2015		2016		Net Salvage (12)	Salvage Accrual (13)=(12)/5
	Cost of Removal (2)	Gross Salvage (3)	Cost of Removal (4)	Gross Salvage (5)	Cost of Removal (6)	Gross Salvage (7)	Cost of Removal (8)	Gross Salvage (9)	Cost of Removal (10)	Gross Salvage (11)		
352.1					1,549.65						(1,549.65)	(310)
353			48,560.22		844.17						(49,404.39)	(9,881)
355	35,861.06		3,252.85		22,084.12		2,167.61		44,772.00		(108,137.64)	(21,628)
356.1	11,667.87		51.28		12,111.73		2,948.95				(26,779.83)	(5,356)
362			520,665.89		166,530.97		1,316.45		98,327.00		(786,840.31)	(157,368)
364	469,356.42		1,092,276.41	167.86	467,581.73	1,482.81	572,486.14		2,176,051.00	8,704.00	(4,766,397.03)	(953,279)
365	519,867.34		1,227,445.37	80.32	970,548.35	31.81	686,375.24		1,006,035.00		(4,410,559.18)	(882,112)
366			439.41		1,082.94		56.38		2,240.00		(3,818.33)	(764)
367	15,595.25		408,750.48		187,384.00		40,435.35		531,882.00		(1,184,047.08)	(236,809)
368	185,933.76		510,189.38		323,360.85		285,593.58		98,121.00		(1,403,290.57)	(280,640)
369	140,833.72		149,725.71		97,706.45	1.41	103,281.74		172,452.00		(663,989.21)	(132,800)
370.1			3,513.53				(6.31)				(3,507.22)	(701)
371	12,634.18		17,817.70		9,162.55		3,474.90		2,635.00		(42,889.33)	(8,578)
373.1	69,812.69		62,686.99		35,346.79	233.82	75,696.03				(245,943.68)	(49,189)
373.2	12,718.49		23,946.56		453.42				6,029.00		(37,118.47)	(7,424)
390.1					13,712.56						(19,741.56)	(3,948)
391.2			27,891.33								(27,891.33)	(5,578)
392								5,309.70			5,309.70	1,062
TOTAL	1,473,288.78	0.00	4,097,014.11	248.18	2,309,859.89	1,749.85	1,773,829.05	5,309.70	4,136,544.00	8,704.00	(13,776,515.11)	(2,755,303)

PART VI. SERVICE LIFE STATISTICS

PENNSYLVANIA POWER COMPANY
ACCOUNT 352 STRUCTURES AND IMPROVEMENTS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA POWER COMPANY

ACCOUNT 352 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1892-2013

EXPERIENCE BAND 1943-2014

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	4,276,376		0.0000	1.0000	100.00
0.5	4,279,599		0.0000	1.0000	100.00
1.5	4,224,827		0.0000	1.0000	100.00
2.5	4,268,928	262	0.0001	0.9999	100.00
3.5	4,296,440		0.0000	1.0000	99.99
4.5	4,314,902	40	0.0000	1.0000	99.99
5.5	4,301,380		0.0000	1.0000	99.99
6.5	4,293,364	8,797	0.0020	0.9980	99.99
7.5	4,318,862	1,536	0.0004	0.9996	99.79
8.5	4,315,481		0.0000	1.0000	99.75
9.5	4,372,646	3,819	0.0009	0.9991	99.75
10.5	4,240,190	1,855	0.0004	0.9996	99.67
11.5	4,261,884	41	0.0000	1.0000	99.62
12.5	4,260,252	7,117	0.0017	0.9983	99.62
13.5	4,174,545	1,787	0.0004	0.9996	99.45
14.5	4,228,396		0.0000	1.0000	99.41
15.5	3,542,529		0.0000	1.0000	99.41
16.5	3,457,849		0.0000	1.0000	99.41
17.5	4,018,355	51	0.0000	1.0000	99.41
18.5	2,937,251	872	0.0003	0.9997	99.41
19.5	2,810,391	946	0.0003	0.9997	99.38
20.5	2,804,631	780	0.0003	0.9997	99.35
21.5	2,712,858		0.0000	1.0000	99.32
22.5	2,649,227		0.0000	1.0000	99.32
23.5	2,587,763	1,500	0.0006	0.9994	99.32
24.5	1,153,405		0.0000	1.0000	99.26
25.5	1,093,071	2,630	0.0024	0.9976	99.26
26.5	1,061,577		0.0000	1.0000	99.02
27.5	1,043,318	57	0.0001	0.9999	99.02
28.5	974,499		0.0000	1.0000	99.02
29.5	673,581		0.0000	1.0000	99.02
30.5	617,761		0.0000	1.0000	99.02
31.5	607,387		0.0000	1.0000	99.02
32.5	520,121		0.0000	1.0000	99.02
33.5	492,073		0.0000	1.0000	99.02
34.5	474,367		0.0000	1.0000	99.02
35.5	387,106		0.0000	1.0000	99.02
36.5	357,037		0.0000	1.0000	99.02
37.5	357,287		0.0000	1.0000	99.02
38.5	322,893	72	0.0002	0.9998	99.02

PENNSYLVANIA POWER COMPANY
ACCOUNT 352 STRUCTURES AND IMPROVEMENTS
ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1892-2013			EXPERIENCE BAND 1943-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	293,647		0.0000	1.0000	99.00
40.5	284,447		0.0000	1.0000	99.00
41.5	304,394	364	0.0012	0.9988	99.00
42.5	238,150		0.0000	1.0000	98.88
43.5	211,381		0.0000	1.0000	98.88
44.5	205,358	6,384	0.0311	0.9689	98.88
45.5	194,876		0.0000	1.0000	95.80
46.5	190,794		0.0000	1.0000	95.80
47.5	180,787	53	0.0003	0.9997	95.80
48.5	137,096	385	0.0028	0.9972	95.78
49.5	137,851		0.0000	1.0000	95.51
50.5	131,501	349	0.0027	0.9973	95.51
51.5	125,056		0.0000	1.0000	95.25
52.5	120,432		0.0000	1.0000	95.25
53.5	122,680		0.0000	1.0000	95.25
54.5	125,626		0.0000	1.0000	95.25
55.5	125,946	153	0.0012	0.9988	95.25
56.5	110,522		0.0000	1.0000	95.14
57.5	122,697		0.0000	1.0000	95.14
58.5	124,553		0.0000	1.0000	95.14
59.5	123,186		0.0000	1.0000	95.14
60.5	132,140		0.0000	1.0000	95.14
61.5	89,198		0.0000	1.0000	95.14
62.5	52,969		0.0000	1.0000	95.14
63.5	65,898		0.0000	1.0000	95.14
64.5	67,189		0.0000	1.0000	95.14
65.5	35,655	4,623	0.1297	0.8703	95.14
66.5	39,560		0.0000	1.0000	82.80
67.5	38,323		0.0000	1.0000	82.80
68.5	38,334		0.0000	1.0000	82.80
69.5	38,378		0.0000	1.0000	82.80
70.5	33,762		0.0000	1.0000	82.80
71.5	33,310		0.0000	1.0000	82.80
72.5	33,005		0.0000	1.0000	82.80
73.5	32,666		0.0000	1.0000	82.80
74.5	29,980		0.0000	1.0000	82.80
75.5	29,966		0.0000	1.0000	82.80
76.5	29,966		0.0000	1.0000	82.80
77.5	88,225		0.0000	1.0000	82.80
78.5	88,225		0.0000	1.0000	82.80

PENNSYLVANIA POWER COMPANY

ACCOUNT 352 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1892-2013			EXPERIENCE BAND 1943-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	88,761		0.0000	1.0000	82.80
80.5	87,176		0.0000	1.0000	82.80
81.5	87,176	190	0.0022	0.9978	82.80
82.5	86,983		0.0000	1.0000	82.62
83.5	87,023		0.0000	1.0000	82.62
84.5	76,193		0.0000	1.0000	82.62
85.5	74,425		0.0000	1.0000	82.62
86.5	73,711		0.0000	1.0000	82.62
87.5	64,987		0.0000	1.0000	82.62
88.5	65,219		0.0000	1.0000	82.62
89.5	65,201		0.0000	1.0000	82.62
90.5	74,813		0.0000	1.0000	82.62
91.5	77,071		0.0000	1.0000	82.62
92.5	77,071		0.0000	1.0000	82.62
93.5	77,071		0.0000	1.0000	82.62
94.5	77,071		0.0000	1.0000	82.62
95.5	77,071		0.0000	1.0000	82.62
96.5	77,071		0.0000	1.0000	82.62
97.5	67,415		0.0000	1.0000	82.62
98.5	6,966		0.0000	1.0000	82.62
99.5	6,966		0.0000	1.0000	82.62
100.5	6,966		0.0000	1.0000	82.62
101.5	20,883		0.0000	1.0000	82.62
102.5	20,883		0.0000	1.0000	82.62
103.5	20,883		0.0000	1.0000	82.62
104.5	20,843		0.0000	1.0000	82.62
105.5	20,843		0.0000	1.0000	82.62
106.5	20,843		0.0000	1.0000	82.62
107.5	20,843		0.0000	1.0000	82.62
108.5	20,843		0.0000	1.0000	82.62
109.5	20,611		0.0000	1.0000	82.62
110.5	20,611		0.0000	1.0000	82.62
111.5	20,611		0.0000	1.0000	82.62
112.5	13,916		0.0000	1.0000	82.62
113.5	13,916		0.0000	1.0000	82.62
114.5	13,916		0.0000	1.0000	82.62
115.5	13,916		0.0000	1.0000	82.62
116.5	13,916		0.0000	1.0000	82.62
117.5	13,916		0.0000	1.0000	82.62
118.5	13,916		0.0000	1.0000	82.62

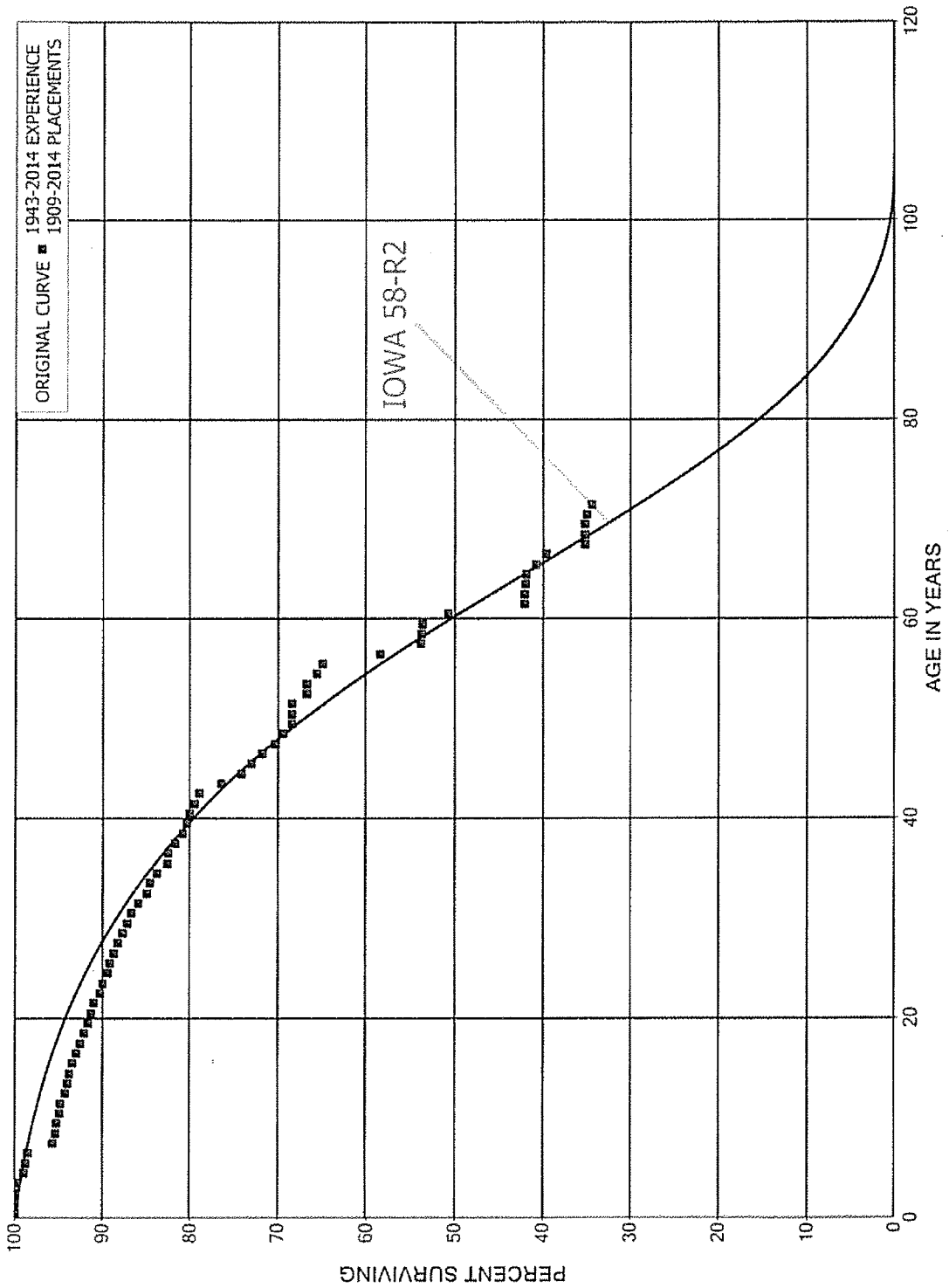
PENNSYLVANIA POWER COMPANY

ACCOUNT 352 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1892-2013			EXPERIENCE BAND 1943-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	13,916		0.0000	1.0000	82.62
120.5	13,916		0.0000	1.0000	82.62
121.5	13,916		0.0000	1.0000	82.62
122.5					82.62

PENNSYLVANIA POWER COMPANY
ACCOUNT 353 STATION EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA POWER COMPANY

ACCOUNT 353 STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1909-2014			EXPERIENCE BAND 1943-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	58,325,078		0.0000	1.0000	100.00
0.5	58,407,813	40,806	0.0007	0.9993	100.00
1.5	58,662,671	75,256	0.0013	0.9987	99.93
2.5	58,298,389	63,299	0.0011	0.9989	99.80
3.5	57,573,219	458,746	0.0080	0.9920	99.69
4.5	56,820,131	75,667	0.0013	0.9987	98.90
5.5	54,594,663	128,567	0.0024	0.9976	98.77
6.5	54,222,613	1,592,531	0.0294	0.9706	98.53
7.5	49,999,577	162,842	0.0033	0.9967	95.64
8.5	47,624,035	101,544	0.0021	0.9979	95.33
9.5	46,790,925	116,622	0.0025	0.9975	95.13
10.5	46,586,824	78,262	0.0017	0.9983	94.89
11.5	45,678,974	255,708	0.0056	0.9944	94.73
12.5	45,415,928	123,175	0.0027	0.9973	94.20
13.5	42,918,629	116,861	0.0027	0.9973	93.94
14.5	41,178,888	122,223	0.0030	0.9970	93.69
15.5	36,759,694	178,108	0.0048	0.9952	93.41
16.5	32,490,725	177,128	0.0055	0.9945	92.96
17.5	33,270,435	138,473	0.0042	0.9958	92.45
18.5	29,840,064	141,216	0.0047	0.9953	92.07
19.5	28,672,454	99,717	0.0035	0.9965	91.63
20.5	27,289,787	107,367	0.0039	0.9961	91.31
21.5	23,490,158	168,936	0.0072	0.9928	90.95
22.5	24,297,455	90,265	0.0037	0.9963	90.30
23.5	23,501,898	134,800	0.0057	0.9943	89.96
24.5	16,412,585	56,936	0.0035	0.9965	89.45
25.5	14,405,818	65,770	0.0046	0.9954	89.14
26.5	13,301,934	64,237	0.0048	0.9952	88.73
27.5	12,407,935	78,812	0.0064	0.9936	88.30
28.5	10,203,036	68,264	0.0067	0.9933	87.74
29.5	8,798,383	45,049	0.0051	0.9949	87.15
30.5	8,486,253	78,301	0.0092	0.9908	86.71
31.5	7,806,998	83,590	0.0107	0.9893	85.91
32.5	7,122,983	33,580	0.0047	0.9953	84.99
33.5	6,394,418	56,189	0.0088	0.9912	84.59
34.5	6,084,985	88,219	0.0145	0.9855	83.84
35.5	5,339,659	10,600	0.0020	0.9980	82.63
36.5	4,530,262	38,000	0.0084	0.9916	82.46
37.5	4,168,392	46,194	0.0111	0.9889	81.77
38.5	3,992,189	22,443	0.0056	0.9944	80.87

PENNSYLVANIA POWER COMPANY

ACCOUNT 353 STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1909-2014

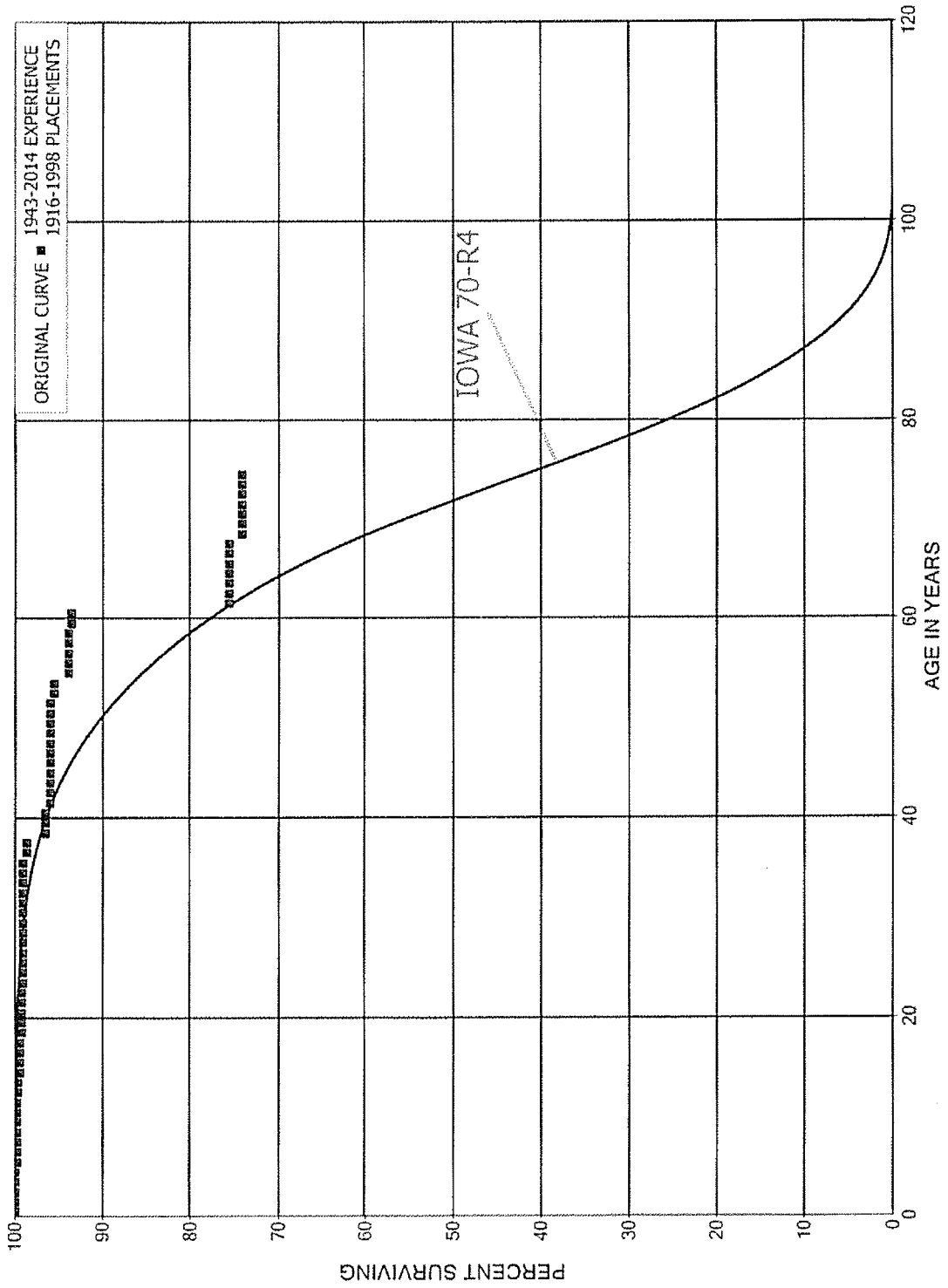
EXPERIENCE BAND 1943-2014

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	3,522,865	14,439	0.0041	0.9959	80.41
40.5	3,419,803	26,416	0.0077	0.9923	80.08
41.5	3,133,413	18,297	0.0058	0.9942	79.46
42.5	2,959,279	97,622	0.0330	0.9670	79.00
43.5	2,591,812	78,809	0.0304	0.9696	76.39
44.5	2,386,688	36,413	0.0153	0.9847	74.07
45.5	2,393,439	38,367	0.0160	0.9840	72.94
46.5	2,306,409	46,269	0.0201	0.9799	71.77
47.5	1,984,220	25,416	0.0128	0.9872	70.33
48.5	1,668,737	23,803	0.0143	0.9857	69.43
49.5	1,361,284	1,393	0.0010	0.9990	68.44
50.5	1,340,656	558	0.0004	0.9996	68.37
51.5	1,066,811	25,567	0.0240	0.9760	68.34
52.5	1,028,714	391	0.0004	0.9996	66.70
53.5	900,235	14,951	0.0166	0.9834	66.68
54.5	994,853	9,654	0.0097	0.9903	65.57
55.5	952,339	95,790	0.1006	0.8994	64.93
56.5	803,092	62,844	0.0783	0.9217	58.40
57.5	710,573	1,474	0.0021	0.9979	53.83
58.5	690,366	741	0.0011	0.9989	53.72
59.5	676,285	36,750	0.0543	0.9457	53.66
60.5	439,553	74,923	0.1705	0.8295	50.75
61.5	339,046		0.0000	1.0000	42.10
62.5	146,644	632	0.0043	0.9957	42.10
63.5	141,371	369	0.0026	0.9974	41.92
64.5	158,302	3,932	0.0248	0.9752	41.81
65.5	117,940	3,280	0.0278	0.9722	40.77
66.5	131,193	14,638	0.1116	0.8884	39.63
67.5	121,037	26	0.0002	0.9998	35.21
68.5	121,446	277	0.0023	0.9977	35.20
69.5	120,183	468	0.0039	0.9961	35.12
70.5	115,901	2,031	0.0175	0.9825	34.99
71.5	107,024	199	0.0019	0.9981	34.37
72.5	95,146	495	0.0052	0.9948	34.31
73.5	93,883	98	0.0010	0.9990	34.13
74.5	93,217		0.0000	1.0000	34.10
75.5	83,461	91	0.0011	0.9989	34.10
76.5	82,145	11	0.0001	0.9999	34.06
77.5	82,030	44	0.0005	0.9995	34.05
78.5	81,953	27	0.0003	0.9997	34.04

PENNSYLVANIA POWER COMPANY
ACCOUNT 353 STATION EQUIPMENT
ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1909-2014			EXPERIENCE BAND 1943-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	82,125		0.0000	1.0000	34.03
80.5	82,142		0.0000	1.0000	34.03
81.5	82,154		0.0000	1.0000	34.03
82.5	82,034	125	0.0015	0.9985	34.03
83.5	81,460		0.0000	1.0000	33.97
84.5	46,332	4,495	0.0970	0.9030	33.97
85.5	3,114		0.0000	1.0000	30.68
86.5	2,908	272	0.0937	0.9063	30.68
87.5	903		0.0000	1.0000	27.80
88.5	903		0.0000	1.0000	27.80
89.5	903		0.0000	1.0000	27.80
90.5	903		0.0000	1.0000	27.80
91.5	903		0.0000	1.0000	27.80
92.5	903		0.0000	1.0000	27.80
93.5	903		0.0000	1.0000	27.80
94.5	903		0.0000	1.0000	27.80
95.5	903		0.0000	1.0000	27.80
96.5	903		0.0000	1.0000	27.80
97.5	903		0.0000	1.0000	27.80
98.5	41		0.0000	1.0000	27.80
99.5	41		0.0000	1.0000	27.80
100.5	41		0.0000	1.0000	27.80
101.5	41		0.0000	1.0000	27.80
102.5	41		0.0000	1.0000	27.80
103.5	41		0.0000	1.0000	27.80
104.5	41		0.0000	1.0000	27.80
105.5					27.80

PENNSYLVANIA POWER COMPANY
ACCOUNT 354 TOWERS AND FIXTURES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA POWER COMPANY

ACCOUNT 354 TOWERS AND FIXTURES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1916-1998			EXPERIENCE BAND 1943-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	12,210,188		0.0000	1.0000	100.00
0.5	12,113,180	651	0.0001	0.9999	100.00
1.5	12,111,807		0.0000	1.0000	99.99
2.5	12,112,647		0.0000	1.0000	99.99
3.5	12,141,618	1,109	0.0001	0.9999	99.99
4.5	12,139,317	25,359	0.0021	0.9979	99.99
5.5	12,111,857	5,190	0.0004	0.9996	99.78
6.5	12,106,667	5,728	0.0005	0.9995	99.73
7.5	12,100,939		0.0000	1.0000	99.69
8.5	12,104,322	345	0.0000	1.0000	99.69
9.5	12,103,977		0.0000	1.0000	99.68
10.5	12,103,977		0.0000	1.0000	99.68
11.5	12,103,977	3,547	0.0003	0.9997	99.68
12.5	12,101,206		0.0000	1.0000	99.65
13.5	12,103,984	30,365	0.0025	0.9975	99.65
14.5	12,194,160		0.0000	1.0000	99.40
15.5	7,412,508		0.0000	1.0000	99.40
16.5	7,608,499		0.0000	1.0000	99.40
17.5	7,622,298	16,301	0.0021	0.9979	99.40
18.5	6,795,254		0.0000	1.0000	99.19
19.5	6,905,295	285	0.0000	1.0000	99.19
20.5	6,905,010	3,602	0.0005	0.9995	99.19
21.5	7,540,744	480	0.0001	0.9999	99.14
22.5	7,403,788	1,089	0.0001	0.9999	99.13
23.5	7,409,901	484	0.0001	0.9999	99.12
24.5	7,140,562	1,554	0.0002	0.9998	99.11
25.5	6,592,156		0.0000	1.0000	99.09
26.5	6,690,194		0.0000	1.0000	99.09
27.5	6,690,194		0.0000	1.0000	99.09
28.5	2,704,658	82	0.0000	1.0000	99.09
29.5	1,874,398	760	0.0004	0.9996	99.08
30.5	1,623,113		0.0000	1.0000	99.04
31.5	1,623,113		0.0000	1.0000	99.04
32.5	1,524,087		0.0000	1.0000	99.04
33.5	1,524,087		0.0000	1.0000	99.04
34.5	1,453,666		0.0000	1.0000	99.04
35.5	1,456,844	5,559	0.0038	0.9962	99.04
36.5	1,184,533		0.0000	1.0000	98.67
37.5	1,150,001	24,758	0.0215	0.9785	98.67
38.5	1,125,243		0.0000	1.0000	96.54

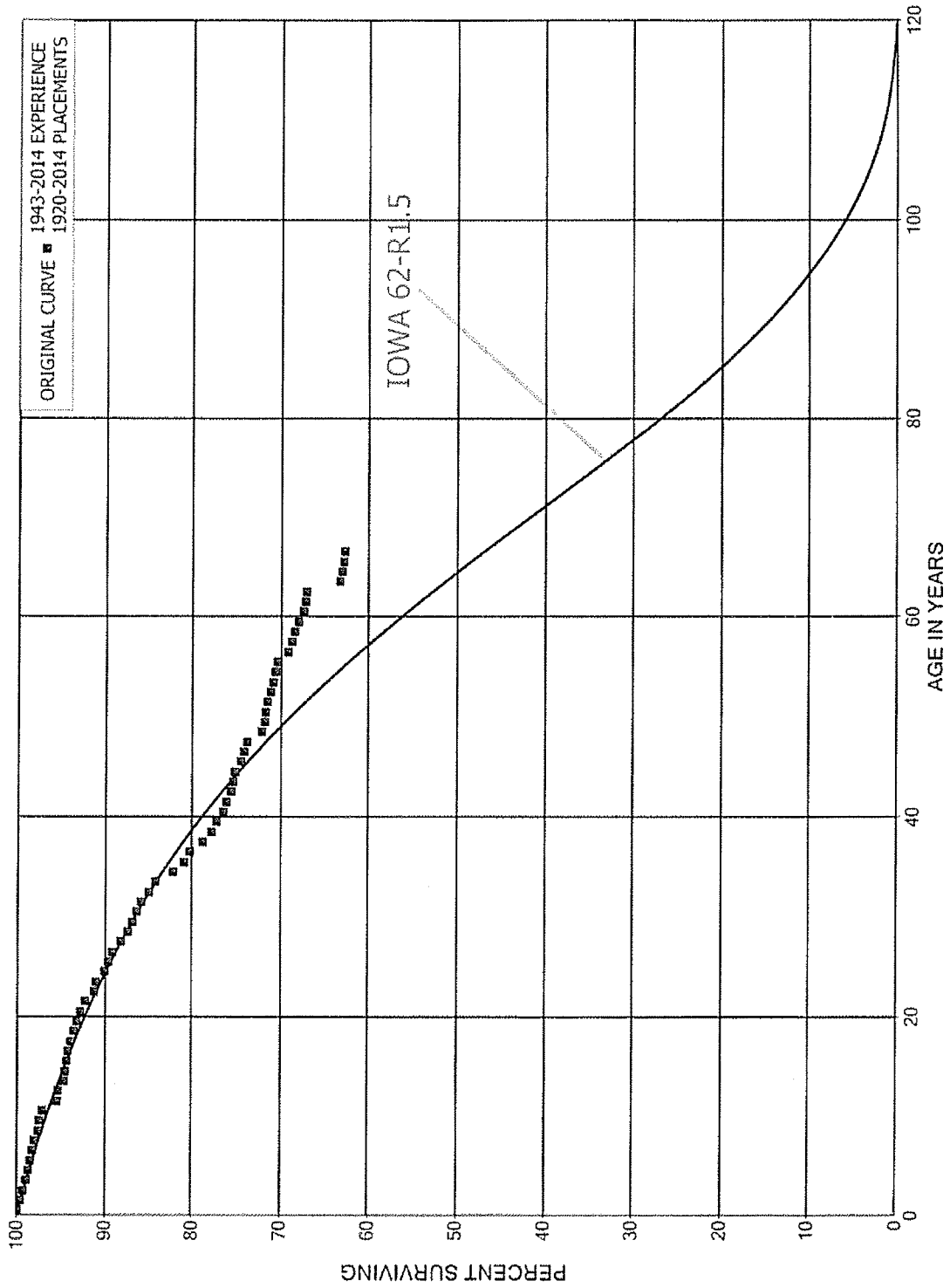
PENNSYLVANIA POWER COMPANY
ACCOUNT 354 TOWERS AND FIXTURES
ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1916-1998			EXPERIENCE BAND 1943-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,003,345		0.0000	1.0000	96.54
40.5	654,483	3,937	0.0060	0.9940	96.54
41.5	652,334	0	0.0000	1.0000	95.96
42.5	629,685		0.0000	1.0000	95.96
43.5	574,539		0.0000	1.0000	95.96
44.5	574,539		0.0000	1.0000	95.96
45.5	575,764		0.0000	1.0000	95.96
46.5	575,764		0.0000	1.0000	95.96
47.5	575,764	378	0.0007	0.9993	95.96
48.5	562,317		0.0000	1.0000	95.90
49.5	579,204		0.0000	1.0000	95.90
50.5	556,078		0.0000	1.0000	95.90
51.5	556,078	2,535	0.0046	0.9954	95.90
52.5	552,317		0.0000	1.0000	95.46
53.5	547,517	9,416	0.0172	0.9828	95.46
54.5	538,101		0.0000	1.0000	93.82
55.5	538,101		0.0000	1.0000	93.82
56.5	521,214		0.0000	1.0000	93.82
57.5	521,214		0.0000	1.0000	93.82
58.5	521,214	1,635	0.0031	0.9969	93.82
59.5	519,579		0.0000	1.0000	93.52
60.5	519,579	99,210	0.1909	0.8091	93.52
61.5	392,390		0.0000	1.0000	75.67
62.5	392,390		0.0000	1.0000	75.67
63.5	392,390		0.0000	1.0000	75.67
64.5	392,390		0.0000	1.0000	75.67
65.5	488,394		0.0000	1.0000	75.67
66.5	488,138		0.0000	1.0000	75.67
67.5	480,818	9,218	0.0192	0.9808	75.67
68.5	471,600		0.0000	1.0000	74.22
69.5	461,491		0.0000	1.0000	74.22
70.5	461,491		0.0000	1.0000	74.22
71.5	450,591		0.0000	1.0000	74.22
72.5	349,141		0.0000	1.0000	74.22
73.5	349,141		0.0000	1.0000	74.22
74.5	178,550		0.0000	1.0000	74.22
75.5	175,733		0.0000	1.0000	74.22
76.5	85,709		0.0000	1.0000	74.22
77.5	85,706		0.0000	1.0000	74.22
78.5	85,706		0.0000	1.0000	74.22

PENNSYLVANIA POWER COMPANY
ACCOUNT 354 TOWERS AND FIXTURES
ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1916-1998			EXPERIENCE BAND 1943-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	85,706		0.0000	1.0000	74.22
80.5	85,706		0.0000	1.0000	74.22
81.5	85,706		0.0000	1.0000	74.22
82.5	85,706		0.0000	1.0000	74.22
83.5	85,706		0.0000	1.0000	74.22
84.5					74.22

PENNSYLVANIA POWER COMPANY
ACCOUNT 355 POLES AND FIXTURES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA POWER COMPANY

ACCOUNT 355 POLES AND FIXTURES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1920-2014			EXPERIENCE BAND 1943-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	23,685,077	6,950	0.0003	0.9997	100.00
0.5	23,702,594	82,136	0.0035	0.9965	99.97
1.5	23,465,228	76,388	0.0033	0.9967	99.62
2.5	21,954,805	83,061	0.0038	0.9962	99.30
3.5	20,815,508	51,880	0.0025	0.9975	98.92
4.5	20,225,349	45,011	0.0022	0.9978	98.68
5.5	21,645,007	48,636	0.0022	0.9978	98.46
6.5	21,492,060	44,650	0.0021	0.9979	98.24
7.5	18,229,153	85,907	0.0047	0.9953	98.03
8.5	17,532,609	17,845	0.0010	0.9990	97.57
9.5	17,104,743	59,134	0.0035	0.9965	97.47
10.5	15,030,160	247,048	0.0164	0.9836	97.13
11.5	14,035,737	21,322	0.0015	0.9985	95.54
12.5	13,769,431	99,811	0.0072	0.9928	95.39
13.5	13,203,390	11,396	0.0009	0.9991	94.70
14.5	13,024,225	23,516	0.0018	0.9982	94.62
15.5	12,511,828	16,488	0.0013	0.9987	94.45
16.5	7,205,254	32,343	0.0045	0.9955	94.32
17.5	7,086,104	23,860	0.0034	0.9966	93.90
18.5	6,499,858	20,106	0.0031	0.9969	93.58
19.5	5,790,170	30,215	0.0052	0.9948	93.30
20.5	5,740,938	30,135	0.0052	0.9948	92.81
21.5	4,773,425	55,074	0.0115	0.9885	92.32
22.5	4,355,552	11,119	0.0026	0.9974	91.26
23.5	4,263,725	47,154	0.0111	0.9889	91.02
24.5	4,020,491	17,907	0.0045	0.9955	90.02
25.5	3,933,573	18,104	0.0046	0.9954	89.62
26.5	3,667,351	43,614	0.0119	0.9881	89.20
27.5	3,226,394	27,140	0.0084	0.9916	88.14
28.5	2,888,509	19,340	0.0067	0.9933	87.40
29.5	2,781,114	13,015	0.0047	0.9953	86.82
30.5	2,699,518	17,327	0.0064	0.9936	86.41
31.5	2,502,868	26,715	0.0107	0.9893	85.85
32.5	2,326,366	20,860	0.0090	0.9910	84.94
33.5	2,071,819	50,410	0.0243	0.9757	84.18
34.5	1,697,773	25,564	0.0151	0.9849	82.13
35.5	1,597,053	11,769	0.0074	0.9926	80.89
36.5	1,437,061	25,810	0.0180	0.9820	80.30
37.5	1,380,407	17,595	0.0127	0.9873	78.85
38.5	1,298,778	10,248	0.0079	0.9921	77.85

PENNSYLVANIA POWER COMPANY

ACCOUNT 355 POLES AND FIXTURES

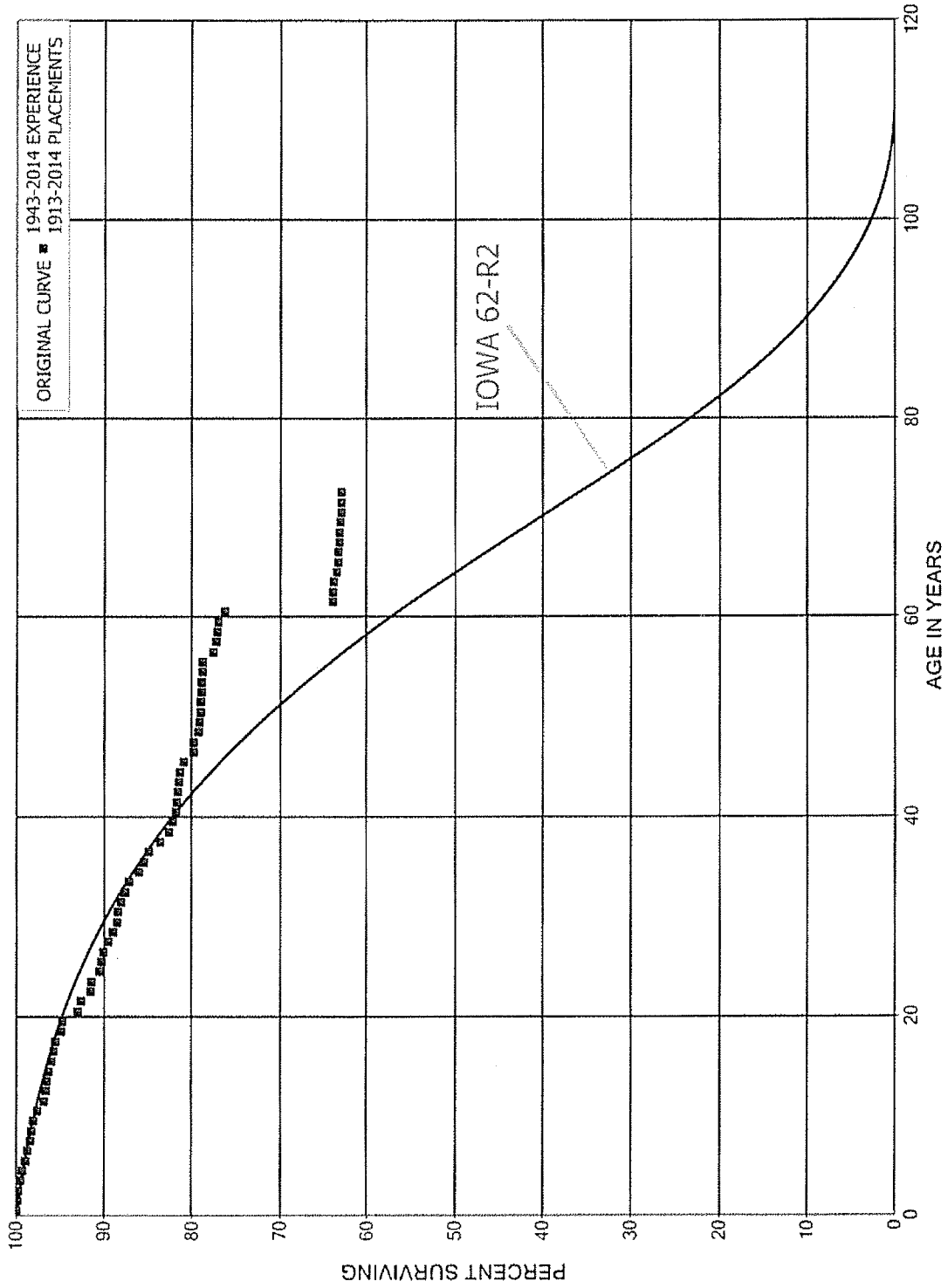
ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1920-2014			EXPERIENCE BAND 1943-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,235,500	11,356	0.0092	0.9908	77.23
40.5	1,205,124	4,830	0.0040	0.9960	76.52
41.5	1,101,464	8,367	0.0076	0.9924	76.22
42.5	966,846	3,589	0.0037	0.9963	75.64
43.5	783,177	1,630	0.0021	0.9979	75.36
44.5	613,227	5,436	0.0089	0.9911	75.20
45.5	583,024	2,940	0.0050	0.9950	74.53
46.5	512,145	2,053	0.0040	0.9960	74.16
47.5	387,861	8,920	0.0230	0.9770	73.86
48.5	324,628	1,347	0.0041	0.9959	72.16
49.5	284,187	493	0.0017	0.9983	71.86
50.5	220,746	779	0.0035	0.9965	71.74
51.5	209,778	995	0.0047	0.9953	71.49
52.5	190,836	933	0.0049	0.9951	71.15
53.5	163,768	406	0.0025	0.9975	70.80
54.5	154,330	466	0.0030	0.9970	70.62
55.5	138,681	2,419	0.0174	0.9826	70.41
56.5	126,417	783	0.0062	0.9938	69.18
57.5	121,515	581	0.0048	0.9952	68.75
58.5	116,897	889	0.0076	0.9924	68.42
59.5	101,575	714	0.0070	0.9930	67.90
60.5	89,581	323	0.0036	0.9964	67.43
61.5	72,399	161	0.0022	0.9978	67.18
62.5	60,769	3,440	0.0566	0.9434	67.03
63.5	49,532	172	0.0035	0.9965	63.24
64.5	48,158	147	0.0030	0.9970	63.02
65.5	34,198	76	0.0022	0.9978	62.83
66.5	32,095		0.0000	1.0000	62.69
67.5	24,549	164	0.0067	0.9933	62.69
68.5	24,389	16	0.0006	0.9994	62.27
69.5	26,282	409	0.0156	0.9844	62.23
70.5	25,507	246	0.0097	0.9903	61.26
71.5	16,520	132	0.0080	0.9920	60.67
72.5	14,015	13	0.0009	0.9991	60.18
73.5	11,275	733	0.0650	0.9350	60.12
74.5	10,542	1,516	0.1438	0.8562	56.22
75.5	6,603	108	0.0164	0.9836	48.13
76.5	5,407	41	0.0076	0.9924	47.34
77.5	4,364	43	0.0098	0.9902	46.99
78.5	3,922	103	0.0263	0.9737	46.52

PENNSYLVANIA POWER COMPANY
ACCOUNT 355 POLES AND FIXTURES
ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1920-2014			EXPERIENCE BAND 1943-2014			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
79.5	3,601	104	0.0288	0.9712	45.30	
80.5	3,497	89	0.0254	0.9746	43.99	
81.5	3,409	74	0.0218	0.9782	42.88	
82.5	3,042	35	0.0115	0.9885	41.94	
83.5	3,007	23	0.0076	0.9924	41.46	
84.5	1,075	47	0.0437	0.9563	41.15	
85.5	924	12	0.0125	0.9875	39.35	
86.5	336		0.0000	1.0000	38.86	
87.5					38.86	

PENNSYLVANIA POWER COMPANY
ACCOUNT 356 OVERHEAD CONDUCTORS AND DEVICES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA POWER COMPANY

ACCOUNT 356 OVERHEAD CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1913-2014			EXPERIENCE BAND 1943-2014			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
0.0	33,307,640	81	0.0000	1.0000	100.00	
0.5	33,220,492	72,504	0.0022	0.9978	100.00	
1.5	32,614,287	31,513	0.0010	0.9990	99.78	
2.5	32,366,859	65,257	0.0020	0.9980	99.69	
3.5	32,008,452	69,425	0.0022	0.9978	99.48	
4.5	31,442,629	84,407	0.0027	0.9973	99.27	
5.5	30,275,037	96,701	0.0032	0.9968	99.00	
6.5	29,814,860	83,820	0.0028	0.9972	98.69	
7.5	26,981,569	35,828	0.0013	0.9987	98.41	
8.5	26,170,314	49,837	0.0019	0.9981	98.28	
9.5	25,855,936	117,511	0.0045	0.9955	98.09	
10.5	23,810,905	185,023	0.0078	0.9922	97.64	
11.5	23,167,956	52,255	0.0023	0.9977	96.89	
12.5	22,936,707	45,135	0.0020	0.9980	96.67	
13.5	22,340,823	51,226	0.0023	0.9977	96.48	
14.5	22,151,225	70,176	0.0032	0.9968	96.26	
15.5	19,663,318	39,930	0.0020	0.9980	95.95	
16.5	17,934,494	52,152	0.0029	0.9971	95.76	
17.5	16,204,846	113,246	0.0070	0.9930	95.48	
18.5	15,501,038	22,828	0.0015	0.9985	94.81	
19.5	14,297,437	261,994	0.0183	0.9817	94.67	
20.5	13,831,104	45,740	0.0033	0.9967	92.94	
21.5	12,906,793	155,588	0.0121	0.9879	92.63	
22.5	12,263,189	16,662	0.0014	0.9986	91.51	
23.5	11,830,712	113,486	0.0096	0.9904	91.39	
24.5	11,378,049	26,761	0.0024	0.9976	90.51	
25.5	10,698,721	28,625	0.0027	0.9973	90.30	
26.5	10,263,086	63,981	0.0062	0.9938	90.06	
27.5	9,834,401	56,116	0.0057	0.9943	89.50	
28.5	6,732,125	34,104	0.0051	0.9949	88.98	
29.5	6,302,166	10,804	0.0017	0.9983	88.53	
30.5	6,096,275	20,513	0.0034	0.9966	88.38	
31.5	5,849,230	28,364	0.0048	0.9952	88.08	
32.5	5,600,121	28,696	0.0051	0.9949	87.66	
33.5	5,292,335	69,329	0.0131	0.9869	87.21	
34.5	4,654,186	31,406	0.0067	0.9933	86.07	
35.5	4,620,950	25,782	0.0056	0.9944	85.49	
36.5	3,923,528	63,558	0.0162	0.9838	85.01	
37.5	3,774,090	43,500	0.0115	0.9885	83.63	
38.5	3,495,294	21,822	0.0062	0.9938	82.67	

PENNSYLVANIA POWER COMPANY

ACCOUNT 356 OVERHEAD CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1913-2014			EXPERIENCE BAND 1943-2014			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
39.5	3,347,459	12,874	0.0038	0.9962	82.15	
40.5	3,011,631	4,535	0.0015	0.9985	81.84	
41.5	2,772,589	2,580	0.0009	0.9991	81.71	
42.5	2,365,261	3,070	0.0013	0.9987	81.64	
43.5	1,984,360	4,574	0.0023	0.9977	81.53	
44.5	1,660,388	7,547	0.0045	0.9955	81.34	
45.5	1,618,207	22,079	0.0136	0.9864	80.97	
46.5	1,468,023	621	0.0004	0.9996	79.87	
47.5	1,296,389	8,604	0.0066	0.9934	79.83	
48.5	1,123,089	2,166	0.0019	0.9981	79.30	
49.5	1,048,002	420	0.0004	0.9996	79.15	
50.5	891,134	942	0.0011	0.9989	79.12	
51.5	868,407	1,186	0.0014	0.9986	79.04	
52.5	786,774	85	0.0001	0.9999	78.93	
53.5	662,291	429	0.0006	0.9994	78.92	
54.5	660,917	340	0.0005	0.9995	78.87	
55.5	648,075	9,590	0.0148	0.9852	78.83	
56.5	610,972	2,932	0.0048	0.9952	77.66	
57.5	601,465	723	0.0012	0.9988	77.29	
58.5	584,462	696	0.0012	0.9988	77.20	
59.5	566,684	6,303	0.0111	0.9889	77.10	
60.5	530,801	85,497	0.1611	0.8389	76.25	
61.5	338,669	205	0.0006	0.9994	63.96	
62.5	318,577	381	0.0012	0.9988	63.93	
63.5	308,349	1,580	0.0051	0.9949	63.85	
64.5	303,396	1,129	0.0037	0.9963	63.52	
65.5	332,391	80	0.0002	0.9998	63.29	
66.5	321,520	242	0.0008	0.9992	63.27	
67.5	308,080	218	0.0007	0.9993	63.22	
68.5	306,724	653	0.0021	0.9979	63.18	
69.5	300,554	516	0.0017	0.9983	63.04	
70.5	292,749	58	0.0002	0.9998	62.94	
71.5	268,159	89	0.0003	0.9997	62.92	
72.5	206,061	40	0.0002	0.9998	62.90	
73.5	203,180	76	0.0004	0.9996	62.89	
74.5	177,278	24	0.0001	0.9999	62.87	
75.5	170,256	75	0.0004	0.9996	62.86	
76.5	87,765	27	0.0003	0.9997	62.83	
77.5	86,634	12	0.0001	0.9999	62.81	
78.5	81,675	68	0.0008	0.9992	62.80	

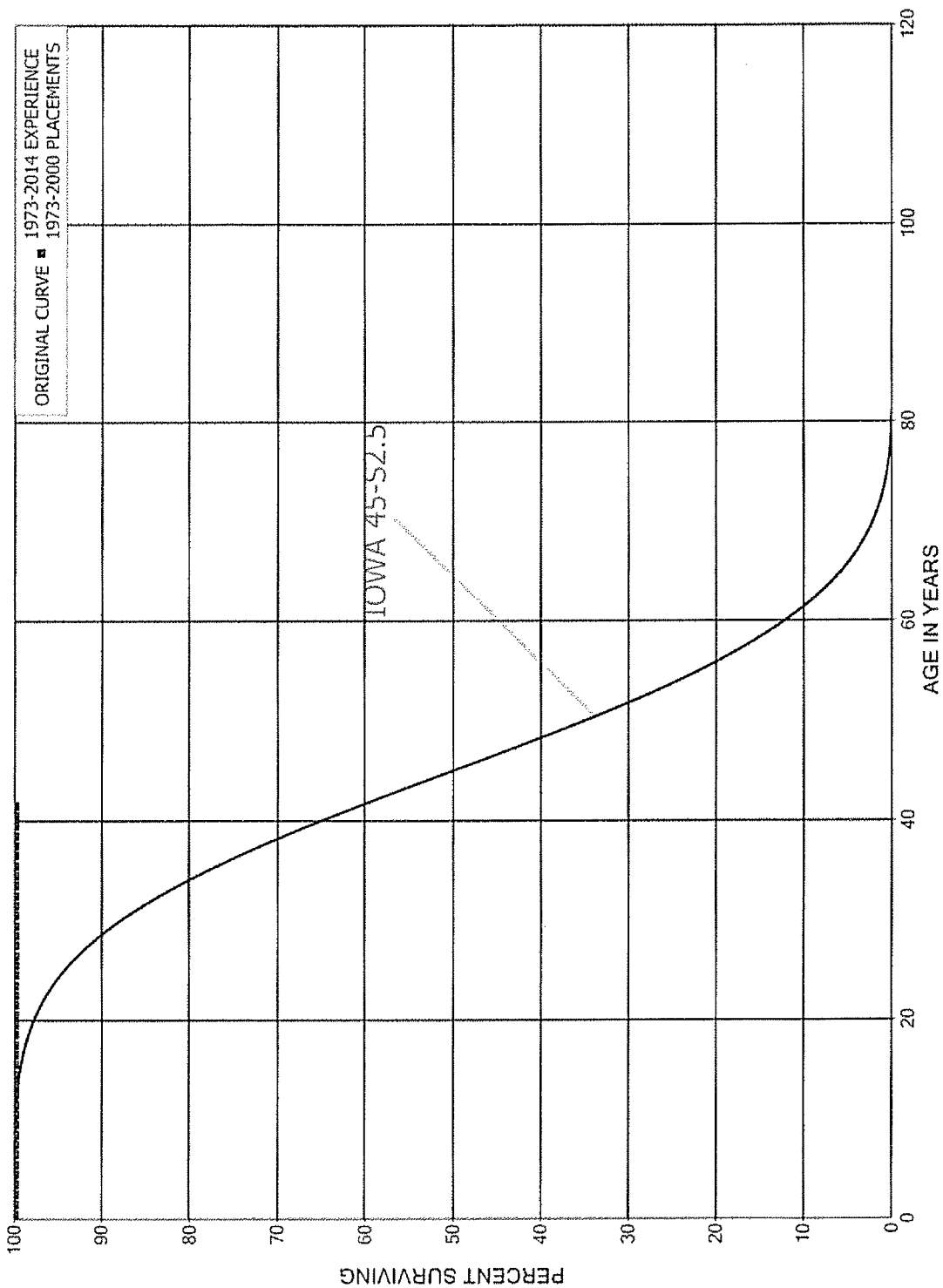
PENNSYLVANIA POWER COMPANY

ACCOUNT 356 OVERHEAD CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1913-2014			EXPERIENCE BAND 1943-2014			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
79.5	81,606	9	0.0001	0.9999	62.75	
80.5	81,389	207	0.0025	0.9975	62.74	
81.5	81,181	143	0.0018	0.9982	62.58	
82.5	81,038	213	0.0026	0.9974	62.47	
83.5	80,304	100	0.0012	0.9988	62.31	
84.5	72,769	245	0.0034	0.9966	62.23	
85.5	66,286	25	0.0004	0.9996	62.02	
86.5	63,505		0.0000	1.0000	62.00	
87.5	50,665	5	0.0001	0.9999	62.00	
88.5	50,660	262	0.0052	0.9948	61.99	
89.5	50,181	4	0.0001	0.9999	61.67	
90.5	50,178		0.0000	1.0000	61.67	
91.5	46,744		0.0000	1.0000	61.67	
92.5	46,744		0.0000	1.0000	61.67	
93.5	46,744	22	0.0005	0.9995	61.67	
94.5	46,722	108	0.0023	0.9977	61.64	
95.5	46,615		0.0000	1.0000	61.50	
96.5	46,615		0.0000	1.0000	61.50	
97.5	46,615	44	0.0009	0.9991	61.50	
98.5	46,557		0.0000	1.0000	61.44	
99.5	46,557	47	0.0010	0.9990	61.44	
100.5	46,511		0.0000	1.0000	61.38	
101.5					61.38	

PENNSYLVANIA POWER COMPANY
ACCOUNT 357 UNDERGROUND CONDUIT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA POWER COMPANY

ACCOUNT 357 UNDERGROUND CONDUIT

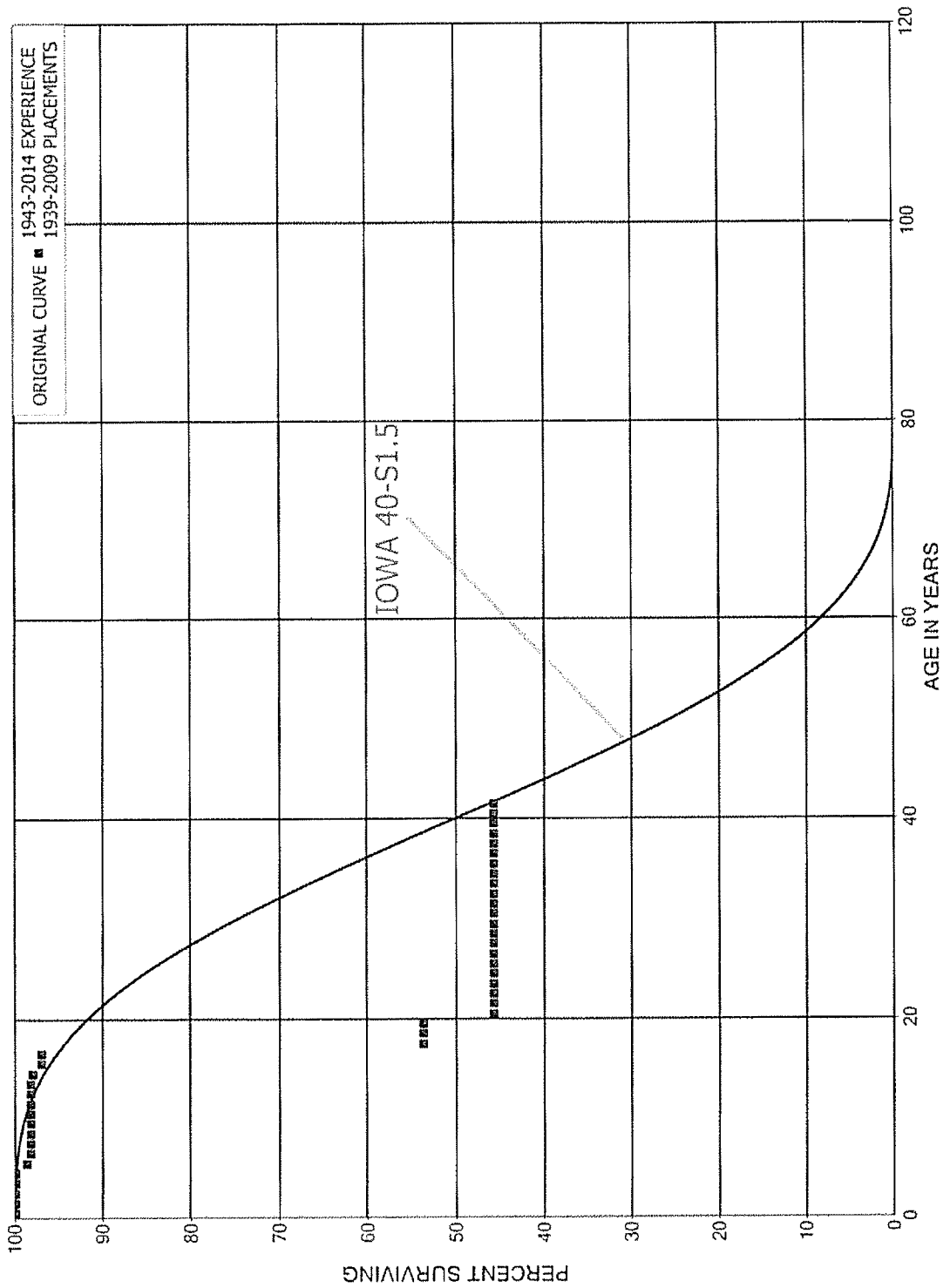
ORIGINAL LIFE TABLE

PLACEMENT BAND 1973-2000			EXPERIENCE BAND 1973-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	109,417		0.0000	1.0000	100.00
0.5	109,417		0.0000	1.0000	100.00
1.5	73,903		0.0000	1.0000	100.00
2.5	109,417		0.0000	1.0000	100.00
3.5	109,417		0.0000	1.0000	100.00
4.5	73,903		0.0000	1.0000	100.00
5.5	73,903		0.0000	1.0000	100.00
6.5	73,903		0.0000	1.0000	100.00
7.5	73,903		0.0000	1.0000	100.00
8.5	73,903		0.0000	1.0000	100.00
9.5	73,903		0.0000	1.0000	100.00
10.5	73,903		0.0000	1.0000	100.00
11.5	73,903		0.0000	1.0000	100.00
12.5	73,903		0.0000	1.0000	100.00
13.5	73,903		0.0000	1.0000	100.00
14.5	73,550		0.0000	1.0000	100.00
15.5	73,550		0.0000	1.0000	100.00
16.5	73,550		0.0000	1.0000	100.00
17.5	73,550		0.0000	1.0000	100.00
18.5	73,550		0.0000	1.0000	100.00
19.5	73,550		0.0000	1.0000	100.00
20.5	73,550		0.0000	1.0000	100.00
21.5	73,550		0.0000	1.0000	100.00
22.5	73,550		0.0000	1.0000	100.00
23.5	73,550		0.0000	1.0000	100.00
24.5	73,550		0.0000	1.0000	100.00
25.5	73,550		0.0000	1.0000	100.00
26.5	73,550		0.0000	1.0000	100.00
27.5	64,302		0.0000	1.0000	100.00
28.5	64,302		0.0000	1.0000	100.00
29.5	64,302		0.0000	1.0000	100.00
30.5	64,302		0.0000	1.0000	100.00
31.5	64,302		0.0000	1.0000	100.00
32.5	64,302		0.0000	1.0000	100.00
33.5	64,302		0.0000	1.0000	100.00
34.5	64,302		0.0000	1.0000	100.00
35.5	64,302		0.0000	1.0000	100.00
36.5	64,302		0.0000	1.0000	100.00
37.5	64,302		0.0000	1.0000	100.00
38.5	64,302		0.0000	1.0000	100.00

PENNSYLVANIA POWER COMPANY
 ACCOUNT 357 UNDERGROUND CONDUIT
 ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1973-2000			EXPERIENCE BAND 1973-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	64,302		0.0000	1.0000	100.00
40.5	64,302		0.0000	1.0000	100.00
41.5					100.00

PENNSYLVANIA POWER COMPANY
ACCOUNT 358 UNDERGROUND CONDUCTORS AND DEVICES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA POWER COMPANY

ACCOUNT 358 UNDERGROUND CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1939-2009			EXPERIENCE BAND 1943-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	402,412		0.0000	1.0000	100.00
0.5	402,412		0.0000	1.0000	100.00
1.5	249,532		0.0000	1.0000	100.00
2.5	554,688	936	0.0017	0.9983	100.00
3.5	563,631		0.0000	1.0000	99.83
4.5	258,475	3,132	0.0121	0.9879	99.83
5.5	254,308	1,142	0.0045	0.9955	98.62
6.5	253,166		0.0000	1.0000	98.18
7.5	253,166		0.0000	1.0000	98.18
8.5	253,166		0.0000	1.0000	98.18
9.5	253,166		0.0000	1.0000	98.18
10.5	100,891		0.0000	1.0000	98.18
11.5	100,891		0.0000	1.0000	98.18
12.5	100,891		0.0000	1.0000	98.18
13.5	100,891	200	0.0020	0.9980	98.18
14.5	100,200	1,089	0.0109	0.9891	97.98
15.5	99,111		0.0000	1.0000	96.92
16.5	99,111	44,280	0.4468	0.5532	96.92
17.5	54,832		0.0000	1.0000	53.62
18.5	54,832		0.0000	1.0000	53.62
19.5	54,832	8,100	0.1477	0.8523	53.62
20.5	46,732		0.0000	1.0000	45.70
21.5	46,732		0.0000	1.0000	45.70
22.5	46,732		0.0000	1.0000	45.70
23.5	46,732		0.0000	1.0000	45.70
24.5	39,527		0.0000	1.0000	45.70
25.5	39,527		0.0000	1.0000	45.70
26.5	39,527		0.0000	1.0000	45.70
27.5	34,545		0.0000	1.0000	45.70
28.5	34,545		0.0000	1.0000	45.70
29.5	34,545		0.0000	1.0000	45.70
30.5	34,545		0.0000	1.0000	45.70
31.5	34,545		0.0000	1.0000	45.70
32.5	34,545		0.0000	1.0000	45.70
33.5	34,545		0.0000	1.0000	45.70
34.5	34,545		0.0000	1.0000	45.70
35.5	34,545		0.0000	1.0000	45.70
36.5	34,545		0.0000	1.0000	45.70
37.5	34,545		0.0000	1.0000	45.70
38.5	34,545		0.0000	1.0000	45.70

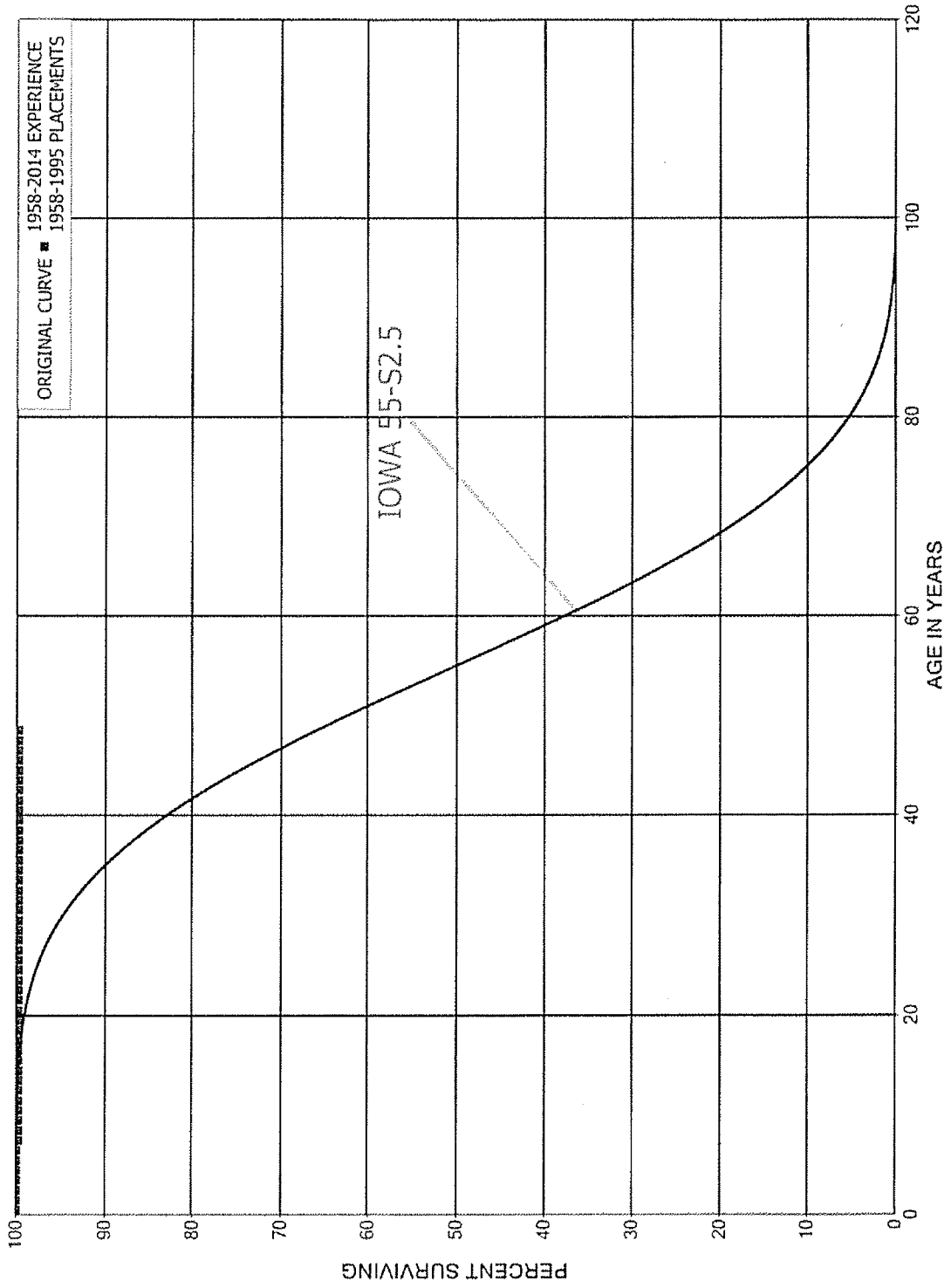
PENNSYLVANIA POWER COMPANY

ACCOUNT 358 UNDERGROUND CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1939-2009			EXPERIENCE BAND 1943-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	34,545		0.0000	1.0000	45.70
40.5	34,545		0.0000	1.0000	45.70
41.5					45.70

PENNSYLVANIA POWER COMPANY
ACCOUNT 359 ROADS AND TRAILS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA POWER COMPANY

ACCOUNT 359 ROADS AND TRAILS

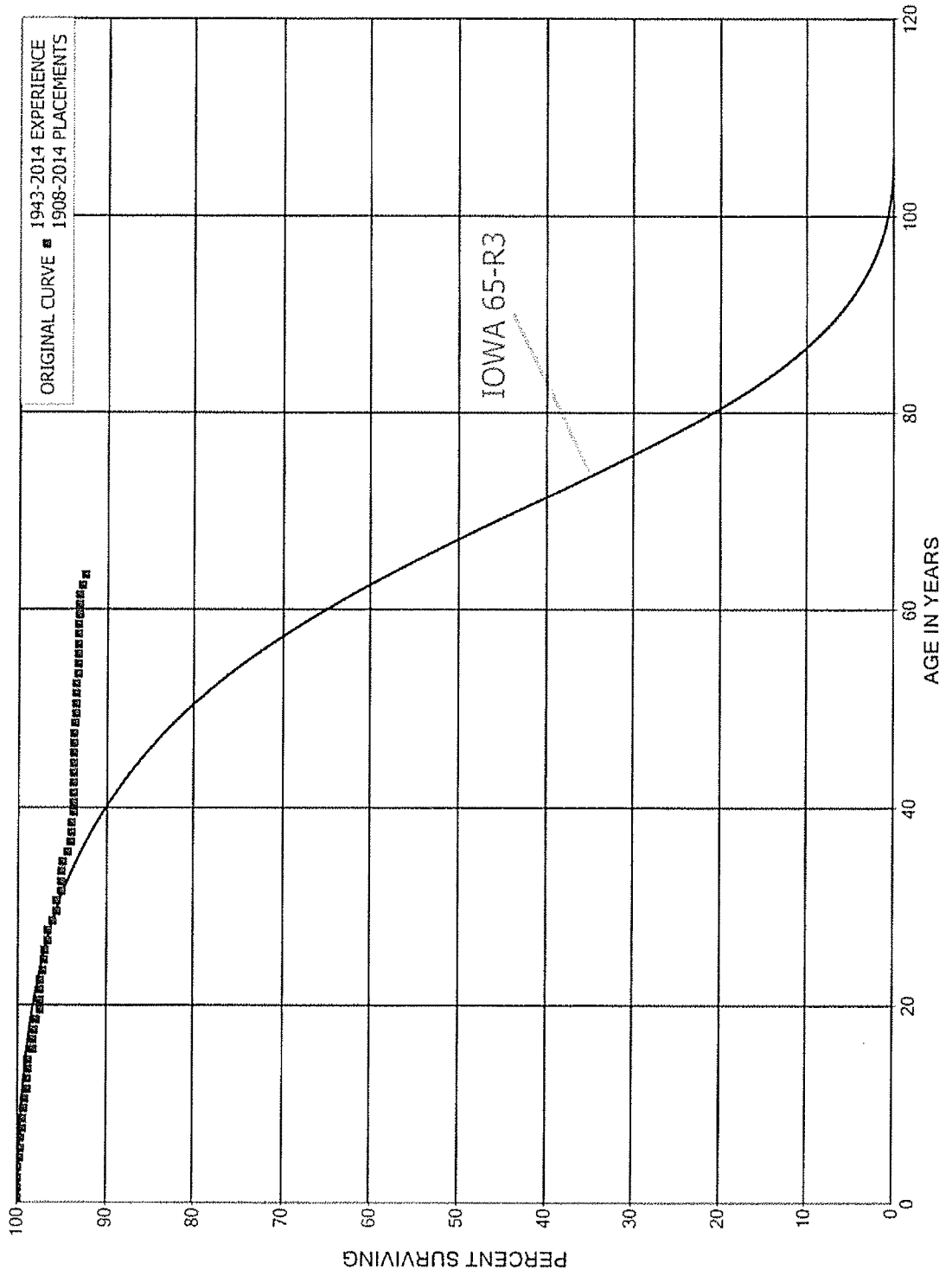
ORIGINAL LIFE TABLE

PLACEMENT BAND 1958-1995			EXPERIENCE BAND 1958-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	112,123		0.0000	1.0000	100.00
0.5	112,123		0.0000	1.0000	100.00
1.5	110,854		0.0000	1.0000	100.00
2.5	110,854		0.0000	1.0000	100.00
3.5	106,371		0.0000	1.0000	100.00
4.5	106,371		0.0000	1.0000	100.00
5.5	85,129		0.0000	1.0000	100.00
6.5	85,129	255	0.0030	0.9970	100.00
7.5	84,874		0.0000	1.0000	99.70
8.5	101,935		0.0000	1.0000	99.70
9.5	101,935		0.0000	1.0000	99.70
10.5	60,540		0.0000	1.0000	99.70
11.5	60,540		0.0000	1.0000	99.70
12.5	58,686		0.0000	1.0000	99.70
13.5	58,686		0.0000	1.0000	99.70
14.5	58,686		0.0000	1.0000	99.70
15.5	58,686		0.0000	1.0000	99.70
16.5	58,686		0.0000	1.0000	99.70
17.5	58,685		0.0000	1.0000	99.70
18.5	56,366		0.0000	1.0000	99.70
19.5	56,366		0.0000	1.0000	99.70
20.5	55,592		0.0000	1.0000	99.70
21.5	55,592		0.0000	1.0000	99.70
22.5	55,592		0.0000	1.0000	99.70
23.5	55,592		0.0000	1.0000	99.70
24.5	55,591		0.0000	1.0000	99.70
25.5	55,591		0.0000	1.0000	99.70
26.5	48,638		0.0000	1.0000	99.70
27.5	47,587		0.0000	1.0000	99.70
28.5	45,984		0.0000	1.0000	99.70
29.5	45,984		0.0000	1.0000	99.70
30.5	45,984		0.0000	1.0000	99.70
31.5	45,984		0.0000	1.0000	99.70
32.5	36,403		0.0000	1.0000	99.70
33.5	36,176		0.0000	1.0000	99.70
34.5	31,063		0.0000	1.0000	99.70
35.5	14,865		0.0000	1.0000	99.70
36.5	10,704		0.0000	1.0000	99.70
37.5	10,704		0.0000	1.0000	99.70
38.5	5,989		0.0000	1.0000	99.70

PENNSYLVANIA POWER COMPANY
ACCOUNT 359 ROADS AND TRAILS
ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1958-1995			EXPERIENCE BAND 1958-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	5,989		0.0000	1.0000	99.70
40.5	5,477		0.0000	1.0000	99.70
41.5	5,477		0.0000	1.0000	99.70
42.5	2,501		0.0000	1.0000	99.70
43.5	2,501		0.0000	1.0000	99.70
44.5	2,501		0.0000	1.0000	99.70
45.5	2,501		0.0000	1.0000	99.70
46.5	2,501		0.0000	1.0000	99.70
47.5	2,501		0.0000	1.0000	99.70
48.5					99.70

PENNSYLVANIA POWER COMPANY
ACCOUNT 361 STRUCTURES AND IMPROVEMENTS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA POWER COMPANY

ACCOUNT 361 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1908-2014

EXPERIENCE BAND 1943-2014

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	2,246,477		0.0000	1.0000	100.00
0.5	2,222,802		0.0000	1.0000	100.00
1.5	2,225,256		0.0000	1.0000	100.00
2.5	2,180,176	779	0.0004	0.9996	100.00
3.5	2,102,566	6,109	0.0029	0.9971	99.96
4.5	1,887,080	538	0.0003	0.9997	99.67
5.5	1,722,799	1,106	0.0006	0.9994	99.65
6.5	1,635,085	3,175	0.0019	0.9981	99.58
7.5	1,372,172		0.0000	1.0000	99.39
8.5	1,368,300	1,656	0.0012	0.9988	99.39
9.5	1,176,433	1,229	0.0010	0.9990	99.27
10.5	1,176,251	2,559	0.0022	0.9978	99.16
11.5	1,193,716	454	0.0004	0.9996	98.95
12.5	1,214,615	272	0.0002	0.9998	98.91
13.5	1,222,351	1,079	0.0009	0.9991	98.89
14.5	1,179,978	5,951	0.0050	0.9950	98.80
15.5	1,166,613	183	0.0002	0.9998	98.30
16.5	1,170,969	1,373	0.0012	0.9988	98.29
17.5	1,145,319	2,133	0.0019	0.9981	98.17
18.5	1,083,004	4,968	0.0046	0.9954	97.99
19.5	1,058,990	151	0.0001	0.9999	97.54
20.5	1,011,448	407	0.0004	0.9996	97.53
21.5	833,452		0.0000	1.0000	97.49
22.5	800,944	2,576	0.0032	0.9968	97.49
23.5	725,904	1,156	0.0016	0.9984	97.17
24.5	645,231	580	0.0009	0.9991	97.02
25.5	573,773	1,834	0.0032	0.9968	96.93
26.5	607,049	181	0.0003	0.9997	96.62
27.5	600,511	3,283	0.0055	0.9945	96.59
28.5	537,973	2,228	0.0041	0.9959	96.06
29.5	520,951		0.0000	1.0000	95.67
30.5	481,219	2,869	0.0060	0.9940	95.67
31.5	507,729		0.0000	1.0000	95.10
32.5	490,533		0.0000	1.0000	95.10
33.5	487,676	1,057	0.0022	0.9978	95.10
34.5	484,105	2,337	0.0048	0.9952	94.89
35.5	443,806	1,824	0.0041	0.9959	94.43
36.5	431,350	368	0.0009	0.9991	94.04
37.5	419,696	74	0.0002	0.9998	93.96
38.5	405,368	755	0.0019	0.9981	93.95

PENNSYLVANIA POWER COMPANY

ACCOUNT 361 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1908-2014			EXPERIENCE BAND 1943-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	383,670		0.0000	1.0000	93.77
40.5	351,247	111	0.0003	0.9997	93.77
41.5	319,779		0.0000	1.0000	93.74
42.5	310,357		0.0000	1.0000	93.74
43.5	316,061		0.0000	1.0000	93.74
44.5	306,206		0.0000	1.0000	93.74
45.5	302,847		0.0000	1.0000	93.74
46.5	294,637		0.0000	1.0000	93.74
47.5	290,607	229	0.0008	0.9992	93.74
48.5	263,724	578	0.0022	0.9978	93.67
49.5	262,011		0.0000	1.0000	93.46
50.5	261,230		0.0000	1.0000	93.46
51.5	254,751		0.0000	1.0000	93.46
52.5	247,676	436	0.0018	0.9982	93.46
53.5	244,254		0.0000	1.0000	93.30
54.5	244,138		0.0000	1.0000	93.30
55.5	236,012		0.0000	1.0000	93.30
56.5	222,954		0.0000	1.0000	93.30
57.5	213,764		0.0000	1.0000	93.30
58.5	200,449	164	0.0008	0.9992	93.30
59.5	195,986		0.0000	1.0000	93.22
60.5	186,044		0.0000	1.0000	93.22
61.5	172,347	639	0.0037	0.9963	93.22
62.5	155,453	576	0.0037	0.9963	92.88
63.5	135,586		0.0000	1.0000	92.53
64.5	126,589		0.0000	1.0000	92.53
65.5	119,538		0.0000	1.0000	92.53
66.5	110,260		0.0000	1.0000	92.53
67.5	107,467		0.0000	1.0000	92.53
68.5	107,456		0.0000	1.0000	92.53
69.5	107,412		0.0000	1.0000	92.53
70.5	106,890	300	0.0028	0.9972	92.53
71.5	106,590		0.0000	1.0000	92.27
72.5	106,590		0.0000	1.0000	92.27
73.5	106,590		0.0000	1.0000	92.27
74.5	106,590		0.0000	1.0000	92.27
75.5	106,537		0.0000	1.0000	92.27
76.5	106,313		0.0000	1.0000	92.27
77.5	45,420		0.0000	1.0000	92.27
78.5	45,420		0.0000	1.0000	92.27

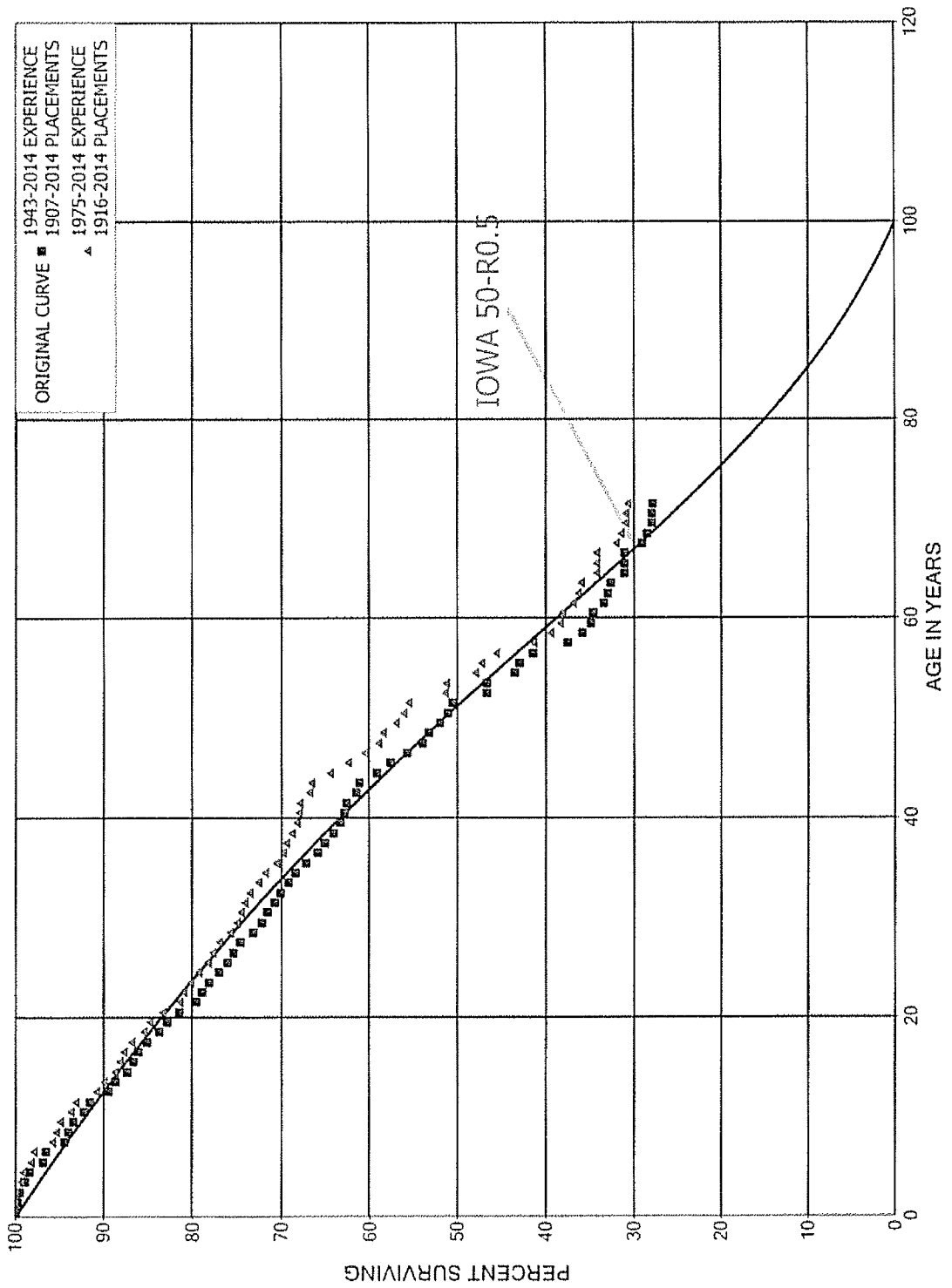
PENNSYLVANIA POWER COMPANY

ACCOUNT 361 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1908-2014			EXPERIENCE BAND 1943-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETM RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	44,884		0.0000	1.0000	92.27
80.5	43,667		0.0000	1.0000	92.27
81.5	43,667		0.0000	1.0000	92.27
82.5	8,611		0.0000	1.0000	92.27
83.5	8,671		0.0000	1.0000	92.27
84.5	5,642		0.0000	1.0000	92.27
85.5	1,731		0.0000	1.0000	92.27
86.5	1,465		0.0000	1.0000	92.27
87.5	126		0.0000	1.0000	92.27
88.5	126		0.0000	1.0000	92.27
89.5	126		0.0000	1.0000	92.27
90.5	60		0.0000	1.0000	92.27
91.5	60		0.0000	1.0000	92.27
92.5	60		0.0000	1.0000	92.27
93.5	60		0.0000	1.0000	92.27
94.5	60		0.0000	1.0000	92.27
95.5	60		0.0000	1.0000	92.27
96.5	60		0.0000	1.0000	92.27
97.5	60		0.0000	1.0000	92.27
98.5	60		0.0000	1.0000	92.27
99.5	60		0.0000	1.0000	92.27
100.5	60		0.0000	1.0000	92.27
101.5	60		0.0000	1.0000	92.27
102.5	60		0.0000	1.0000	92.27
103.5	60		0.0000	1.0000	92.27
104.5					92.27

PENNSYLVANIA POWER COMPANY
 ACCOUNT 362 STATION EQUIPMENT
 ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA POWER COMPANY
ACCOUNT 362 STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1907-2014			EXPERIENCE BAND 1943-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	54,912,532		0.0000	1.0000	100.00
0.5	53,888,193	148,226	0.0028	0.9972	100.00
1.5	51,998,993	87,588	0.0017	0.9983	99.72
2.5	50,409,019	279,952	0.0056	0.9944	99.56
3.5	49,815,630	279,996	0.0056	0.9944	99.00
4.5	45,931,210	756,756	0.0165	0.9835	98.45
5.5	41,745,086	129,844	0.0031	0.9969	96.83
6.5	37,497,725	815,825	0.0218	0.9782	96.52
7.5	33,430,491	174,463	0.0052	0.9948	94.42
8.5	32,412,416	179,723	0.0055	0.9945	93.93
9.5	27,461,328	364,721	0.0133	0.9867	93.41
10.5	26,402,039	188,922	0.0072	0.9928	92.17
11.5	26,738,567	619,701	0.0232	0.9768	91.51
12.5	25,617,132	218,617	0.0085	0.9915	89.39
13.5	24,201,203	366,322	0.0151	0.9849	88.63
14.5	23,215,342	174,351	0.0075	0.9925	87.29
15.5	22,374,443	153,888	0.0069	0.9931	86.63
16.5	21,943,944	246,907	0.0113	0.9887	86.03
17.5	21,289,619	347,655	0.0163	0.9837	85.07
18.5	20,334,048	210,864	0.0104	0.9896	83.68
19.5	19,524,620	317,318	0.0163	0.9837	82.81
20.5	17,619,796	402,599	0.0228	0.9772	81.46
21.5	16,289,865	126,592	0.0078	0.9922	79.60
22.5	14,560,014	138,976	0.0095	0.9905	78.98
23.5	12,537,447	184,299	0.0147	0.9853	78.23
24.5	11,460,310	158,402	0.0138	0.9862	77.08
25.5	10,549,833	89,036	0.0084	0.9916	76.01
26.5	10,123,717	107,525	0.0106	0.9894	75.37
27.5	9,759,065	177,112	0.0181	0.9819	74.57
28.5	9,086,592	124,158	0.0137	0.9863	73.22
29.5	8,811,000	85,620	0.0097	0.9903	72.22
30.5	8,145,768	87,688	0.0108	0.9892	71.52
31.5	8,013,808	76,191	0.0095	0.9905	70.75
32.5	7,741,204	99,676	0.0129	0.9871	70.07
33.5	7,480,020	80,011	0.0107	0.9893	69.17
34.5	7,014,251	128,853	0.0184	0.9816	68.43
35.5	6,165,130	118,850	0.0193	0.9807	67.17
36.5	5,571,259	65,087	0.0117	0.9883	65.88
37.5	5,162,042	86,021	0.0167	0.9833	65.11
38.5	4,912,313	56,937	0.0116	0.9884	64.03

PENNSYLVANIA POWER COMPANY
ACCOUNT 362 STATION EQUIPMENT
ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1907-2014			EXPERIENCE BAND 1943-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	4,714,187	33,544	0.0071	0.9929	63.28
40.5	4,110,446	11,785	0.0029	0.9971	62.83
41.5	3,823,380	72,952	0.0191	0.9809	62.65
42.5	3,590,580	15,730	0.0044	0.9956	61.46
43.5	3,323,356	106,769	0.0321	0.9679	61.19
44.5	3,030,797	83,390	0.0275	0.9725	59.22
45.5	2,875,438	92,102	0.0320	0.9680	57.59
46.5	2,586,574	85,124	0.0329	0.9671	55.75
47.5	2,148,418	24,301	0.0113	0.9887	53.91
48.5	1,967,041	50,877	0.0259	0.9741	53.30
49.5	1,809,189	30,606	0.0169	0.9831	51.92
50.5	1,749,802	17,656	0.0101	0.9899	51.05
51.5	1,706,876	132,271	0.0775	0.9225	50.53
52.5	1,523,904	1,409	0.0009	0.9991	46.62
53.5	1,482,027	97,435	0.0657	0.9343	46.57
54.5	1,356,693	18,028	0.0133	0.9867	43.51
55.5	1,302,851	46,239	0.0355	0.9645	42.93
56.5	1,101,042	102,719	0.0933	0.9067	41.41
57.5	889,276	41,558	0.0467	0.9533	37.55
58.5	904,910	25,005	0.0276	0.9724	35.79
59.5	854,164	3,650	0.0043	0.9957	34.80
60.5	764,129	26,645	0.0349	0.9651	34.65
61.5	557,042	7,446	0.0134	0.9866	33.44
62.5	460,416	5,011	0.0109	0.9891	33.00
63.5	391,042	18,335	0.0469	0.9531	32.64
64.5	223,943	152	0.0007	0.9993	31.11
65.5	191,551		0.0000	1.0000	31.09
66.5	150,739	9,807	0.0651	0.9349	31.09
67.5	141,499	2,830	0.0200	0.9800	29.06
68.5	136,314	2,347	0.0172	0.9828	28.48
69.5	133,223	21	0.0002	0.9998	27.99
70.5	129,018	778	0.0060	0.9940	27.99
71.5	128,078		0.0000	1.0000	27.82
72.5	127,659		0.0000	1.0000	27.82
73.5	126,871		0.0000	1.0000	27.82
74.5	111,734		0.0000	1.0000	27.82
75.5	106,186		0.0000	1.0000	27.82
76.5	106,073		0.0000	1.0000	27.82
77.5	107,713		0.0000	1.0000	27.82
78.5	107,208		0.0000	1.0000	27.82

PENNSYLVANIA POWER COMPANY
 ACCOUNT 362 STATION EQUIPMENT
 ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1907-2014			EXPERIENCE BAND 1943-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	107,208		0.0000	1.0000	27.82
80.5	107,208		0.0000	1.0000	27.82
81.5	107,150	16,983	0.1585	0.8415	27.82
82.5	90,167		0.0000	1.0000	23.41
83.5	90,128		0.0000	1.0000	23.41
84.5	49,381	400	0.0081	0.9919	23.41
85.5	7,718		0.0000	1.0000	23.22
86.5	7,486		0.0000	1.0000	23.22
87.5	3,032		0.0000	1.0000	23.22
88.5	2,465		0.0000	1.0000	23.22
89.5	2,465		0.0000	1.0000	23.22
90.5	2,255		0.0000	1.0000	23.22
91.5	1,654		0.0000	1.0000	23.22
92.5	1,654		0.0000	1.0000	23.22
93.5	1,654		0.0000	1.0000	23.22
94.5	1,654		0.0000	1.0000	23.22
95.5	1,654		0.0000	1.0000	23.22
96.5	1,654		0.0000	1.0000	23.22
97.5	1,654		0.0000	1.0000	23.22
98.5					23.22

PENNSYLVANIA POWER COMPANY

ACCOUNT 362 STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1916-2014			EXPERIENCE BAND 1975-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	47,114,681		0.0000	1.0000	100.00
0.5	46,711,537	90,120	0.0019	0.9981	100.00
1.5	45,304,073	59,650	0.0013	0.9987	99.81
2.5	44,033,076	231,131	0.0052	0.9948	99.68
3.5	43,733,171	78,310	0.0018	0.9982	99.15
4.5	40,244,491	383,354	0.0095	0.9905	98.97
5.5	36,554,492	97,380	0.0027	0.9973	98.03
6.5	32,787,798	740,985	0.0226	0.9774	97.77
7.5	29,310,977	125,892	0.0043	0.9957	95.56
8.5	28,567,335	118,769	0.0042	0.9958	95.15
9.5	23,834,761	324,013	0.0136	0.9864	94.76
10.5	22,845,940	137,009	0.0060	0.9940	93.47
11.5	23,296,246	584,633	0.0251	0.9749	92.91
12.5	22,176,299	198,822	0.0090	0.9910	90.58
13.5	20,465,301	275,184	0.0134	0.9866	89.76
14.5	19,737,173	129,986	0.0066	0.9934	88.56
15.5	18,966,017	108,853	0.0057	0.9943	87.97
16.5	18,739,759	187,729	0.0100	0.9900	87.47
17.5	18,301,855	269,401	0.0147	0.9853	86.59
18.5	17,487,740	137,747	0.0079	0.9921	85.32
19.5	16,762,589	283,591	0.0169	0.9831	84.65
20.5	15,087,809	350,174	0.0232	0.9768	83.21
21.5	14,048,391	75,084	0.0053	0.9947	81.28
22.5	12,577,152	114,719	0.0091	0.9909	80.85
23.5	10,635,115	124,067	0.0117	0.9883	80.11
24.5	9,859,937	126,203	0.0128	0.9872	79.18
25.5	9,154,704	66,126	0.0072	0.9928	78.16
26.5	8,827,751	84,356	0.0096	0.9904	77.60
27.5	8,508,205	141,403	0.0166	0.9834	76.86
28.5	7,871,545	75,839	0.0096	0.9904	75.58
29.5	7,646,157	48,946	0.0064	0.9936	74.85
30.5	7,022,128	44,836	0.0064	0.9936	74.37
31.5	6,949,068	49,665	0.0071	0.9929	73.90
32.5	6,706,528	88,421	0.0132	0.9868	73.37
33.5	6,476,477	72,789	0.0112	0.9888	72.40
34.5	6,060,001	104,415	0.0172	0.9828	71.59
35.5	5,280,256	59,516	0.0113	0.9887	70.35
36.5	4,762,574	17,116	0.0036	0.9964	69.56
37.5	4,426,551	47,292	0.0107	0.9893	69.31
38.5	4,216,269	32,900	0.0078	0.9922	68.57

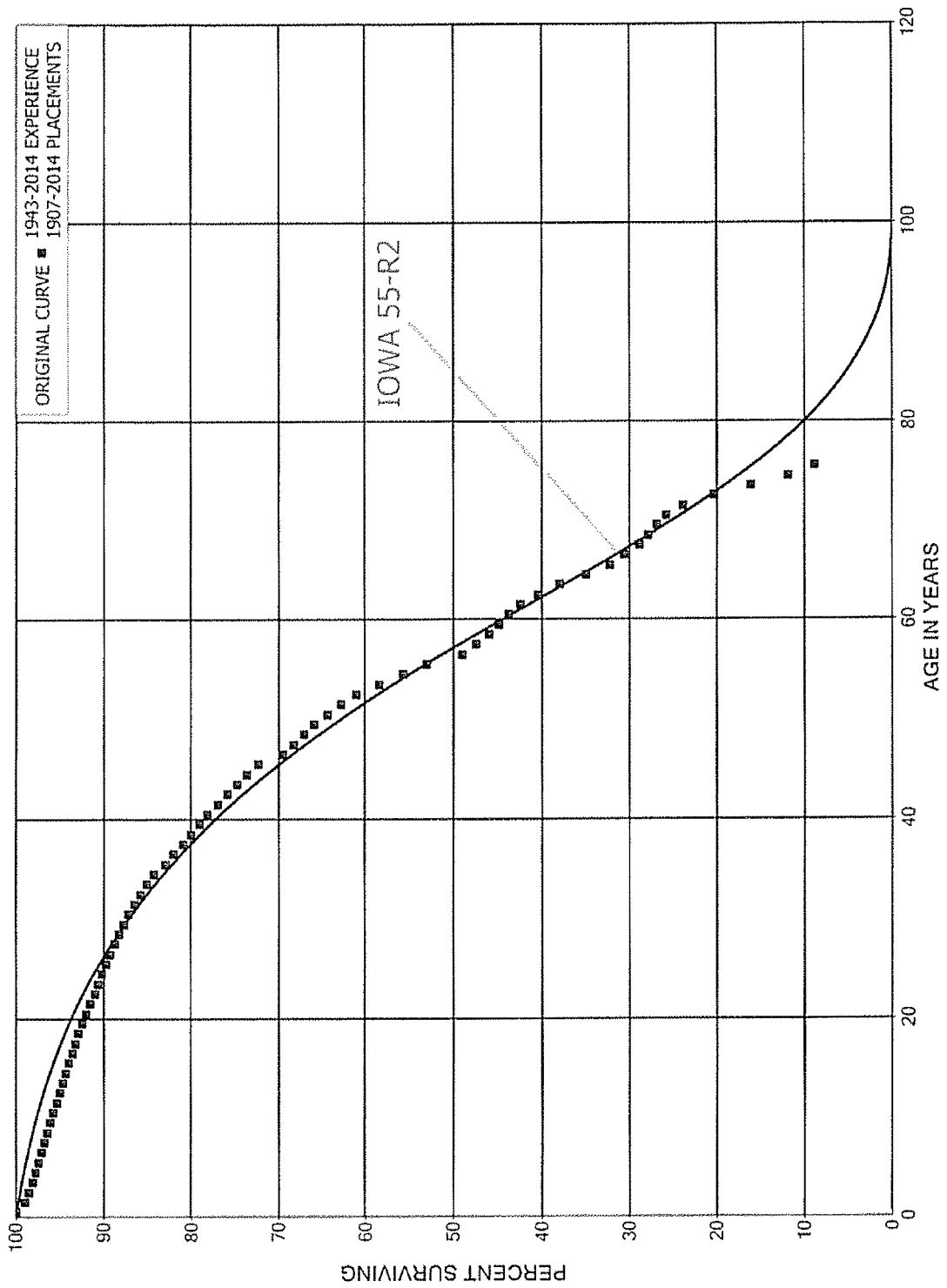
PENNSYLVANIA POWER COMPANY
ACCOUNT 362 STATION EQUIPMENT
ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1916-2014			EXPERIENCE BAND 1975-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	4,051,921	9,785	0.0024	0.9976	68.04
40.5	3,474,103	7,976	0.0023	0.9977	67.87
41.5	3,193,791	53,199	0.0167	0.9833	67.72
42.5	2,984,393	8,563	0.0029	0.9971	66.59
43.5	2,724,337	87,998	0.0323	0.9677	66.40
44.5	2,589,803	79,277	0.0306	0.9694	64.25
45.5	2,703,813	80,662	0.0298	0.9702	62.28
46.5	2,427,469	63,381	0.0261	0.9739	60.43
47.5	2,023,549	17,577	0.0087	0.9913	58.85
48.5	1,948,249	49,438	0.0254	0.9746	58.34
49.5	1,799,287	28,790	0.0160	0.9840	56.86
50.5	1,747,820	17,656	0.0101	0.9899	55.95
51.5	1,705,303	131,066	0.0769	0.9231	55.38
52.5	1,523,542	1,409	0.0009	0.9991	51.13
53.5	1,481,665	97,435	0.0658	0.9342	51.08
54.5	1,356,693	18,028	0.0133	0.9867	47.72
55.5	1,302,851	46,239	0.0355	0.9645	47.09
56.5	1,101,042	102,719	0.0933	0.9067	45.41
57.5	889,276	41,558	0.0467	0.9533	41.18
58.5	904,910	25,005	0.0276	0.9724	39.25
59.5	854,164	3,650	0.0043	0.9957	38.17
60.5	764,129	26,645	0.0349	0.9651	38.01
61.5	557,042	7,446	0.0134	0.9866	36.68
62.5	460,416	5,011	0.0109	0.9891	36.19
63.5	391,042	18,335	0.0469	0.9531	35.80
64.5	223,943	152	0.0007	0.9993	34.12
65.5	191,551		0.0000	1.0000	34.09
66.5	150,739	9,807	0.0651	0.9349	34.09
67.5	141,499	2,830	0.0200	0.9800	31.88
68.5	136,314	2,347	0.0172	0.9828	31.24
69.5	133,223	21	0.0002	0.9998	30.70
70.5	129,018	778	0.0060	0.9940	30.70
71.5	128,078		0.0000	1.0000	30.51
72.5	127,659		0.0000	1.0000	30.51
73.5	126,871		0.0000	1.0000	30.51
74.5	111,734		0.0000	1.0000	30.51
75.5	106,186		0.0000	1.0000	30.51
76.5	106,073		0.0000	1.0000	30.51
77.5	107,713		0.0000	1.0000	30.51
78.5	107,208		0.0000	1.0000	30.51

PENNSYLVANIA POWER COMPANY
 ACCOUNT 362 STATION EQUIPMENT
 ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1916-2014			EXPERIENCE BAND 1975-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	107,208		0.0000	1.0000	30.51
80.5	107,208		0.0000	1.0000	30.51
81.5	107,150	16,983	0.1585	0.8415	30.51
82.5	90,167		0.0000	1.0000	25.67
83.5	90,128		0.0000	1.0000	25.67
84.5	49,381	400	0.0081	0.9919	25.67
85.5	7,718		0.0000	1.0000	25.47
86.5	7,486		0.0000	1.0000	25.47
87.5	3,032		0.0000	1.0000	25.47
88.5	2,465		0.0000	1.0000	25.47
89.5	2,465		0.0000	1.0000	25.47
90.5	2,255		0.0000	1.0000	25.47
91.5	1,654		0.0000	1.0000	25.47
92.5	1,654		0.0000	1.0000	25.47
93.5	1,654		0.0000	1.0000	25.47
94.5	1,654		0.0000	1.0000	25.47
95.5	1,654		0.0000	1.0000	25.47
96.5	1,654		0.0000	1.0000	25.47
97.5	1,654		0.0000	1.0000	25.47
98.5					25.47

PENNSYLVANIA POWER COMPANY
ACCOUNT 364 POLES, TOWERS AND FIXTURES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA POWER COMPANY

ACCOUNT 364 POLES, TOWERS AND FIXTURES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1907-2014

EXPERIENCE BAND 1943-2014

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	108,541,188	71,919	0.0007	0.9993	100.00
0.5	103,067,895	1,022,854	0.0099	0.9901	99.93
1.5	97,335,293	466,260	0.0048	0.9952	98.94
2.5	92,808,194	405,043	0.0044	0.9956	98.47
3.5	89,613,244	270,843	0.0030	0.9970	98.04
4.5	81,129,542	294,278	0.0036	0.9964	97.74
5.5	78,644,622	228,746	0.0029	0.9971	97.39
6.5	74,810,818	253,921	0.0034	0.9966	97.10
7.5	72,538,995	278,585	0.0038	0.9962	96.77
8.5	69,879,314	234,687	0.0034	0.9966	96.40
9.5	66,883,198	266,633	0.0040	0.9960	96.08
10.5	64,793,024	243,076	0.0038	0.9962	95.70
11.5	62,236,827	238,967	0.0038	0.9962	95.34
12.5	59,662,700	231,603	0.0039	0.9961	94.97
13.5	57,775,211	199,022	0.0034	0.9966	94.60
14.5	56,132,988	224,671	0.0040	0.9960	94.28
15.5	54,006,269	210,643	0.0039	0.9961	93.90
16.5	51,130,558	197,220	0.0039	0.9961	93.53
17.5	49,022,475	204,798	0.0042	0.9958	93.17
18.5	46,372,743	193,133	0.0042	0.9958	92.78
19.5	44,022,170	192,171	0.0044	0.9956	92.40
20.5	40,903,318	218,841	0.0054	0.9946	91.99
21.5	37,835,982	203,539	0.0054	0.9946	91.50
22.5	35,291,616	168,890	0.0048	0.9952	91.01
23.5	32,870,812	158,195	0.0048	0.9952	90.57
24.5	30,657,533	138,235	0.0045	0.9955	90.14
25.5	28,719,380	129,222	0.0045	0.9955	89.73
26.5	26,916,879	175,487	0.0065	0.9935	89.33
27.5	25,192,587	143,403	0.0057	0.9943	88.74
28.5	23,631,187	142,892	0.0060	0.9940	88.24
29.5	21,669,826	141,250	0.0065	0.9935	87.71
30.5	20,272,239	143,456	0.0071	0.9929	87.13
31.5	18,397,855	144,613	0.0079	0.9921	86.52
32.5	17,085,251	147,286	0.0086	0.9914	85.84
33.5	15,534,360	150,134	0.0097	0.9903	85.10
34.5	14,236,948	222,374	0.0156	0.9844	84.28
35.5	13,042,013	149,067	0.0114	0.9886	82.96
36.5	12,138,411	149,934	0.0124	0.9876	82.01
37.5	11,512,130	132,369	0.0115	0.9885	81.00
38.5	10,814,017	129,509	0.0120	0.9880	80.07

PENNSYLVANIA POWER COMPANY

ACCOUNT 364 POLES, TOWERS AND FIXTURES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1907-2014

EXPERIENCE BAND 1943-2014

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	9,994,890	124,032	0.0124	0.9876	79.11
40.5	9,196,738	137,411	0.0149	0.9851	78.13
41.5	8,545,585	121,415	0.0142	0.9858	76.96
42.5	7,858,128	122,947	0.0156	0.9844	75.87
43.5	7,166,131	105,954	0.0148	0.9852	74.68
44.5	6,608,620	111,277	0.0168	0.9832	73.57
45.5	6,004,042	230,405	0.0384	0.9616	72.34
46.5	5,092,180	93,894	0.0184	0.9816	69.56
47.5	4,551,342	78,454	0.0172	0.9828	68.28
48.5	3,996,366	72,026	0.0180	0.9820	67.10
49.5	3,565,330	82,125	0.0230	0.9770	65.89
50.5	3,159,209	75,658	0.0239	0.9761	64.37
51.5	2,822,988	80,018	0.0283	0.9717	62.83
52.5	2,471,608	106,668	0.0432	0.9568	61.05
53.5	2,124,082	101,120	0.0476	0.9524	58.42
54.5	1,789,991	88,199	0.0493	0.9507	55.63
55.5	1,475,207	110,886	0.0752	0.9248	52.89
56.5	1,226,402	38,504	0.0314	0.9686	48.92
57.5	1,143,392	34,378	0.0301	0.9699	47.38
58.5	962,616	23,026	0.0239	0.9761	45.96
59.5	838,447	20,933	0.0250	0.9750	44.86
60.5	705,976	21,406	0.0303	0.9697	43.74
61.5	574,306	27,465	0.0478	0.9522	42.41
62.5	486,334	29,382	0.0604	0.9396	40.38
63.5	385,715	30,142	0.0781	0.9219	37.94
64.5	309,140	23,683	0.0766	0.9234	34.98
65.5	241,328	12,859	0.0533	0.9467	32.30
66.5	196,962	11,168	0.0567	0.9433	30.58
67.5	170,521	5,801	0.0340	0.9660	28.84
68.5	157,434	5,901	0.0375	0.9625	27.86
69.5	147,460	5,954	0.0404	0.9596	26.82
70.5	137,697	10,056	0.0730	0.9270	25.74
71.5	124,134	18,741	0.1510	0.8490	23.86
72.5	100,458	20,974	0.2088	0.7912	20.25
73.5	71,830	18,612	0.2591	0.7409	16.03
74.5	47,068	12,131	0.2577	0.7423	11.87
75.5	26,987	1,147	0.0425	0.9575	8.81
76.5	20,505	316	0.0154	0.9846	8.44
77.5	4,519	191	0.0424	0.9576	8.31
78.5	2,462	187	0.0761	0.9239	7.96

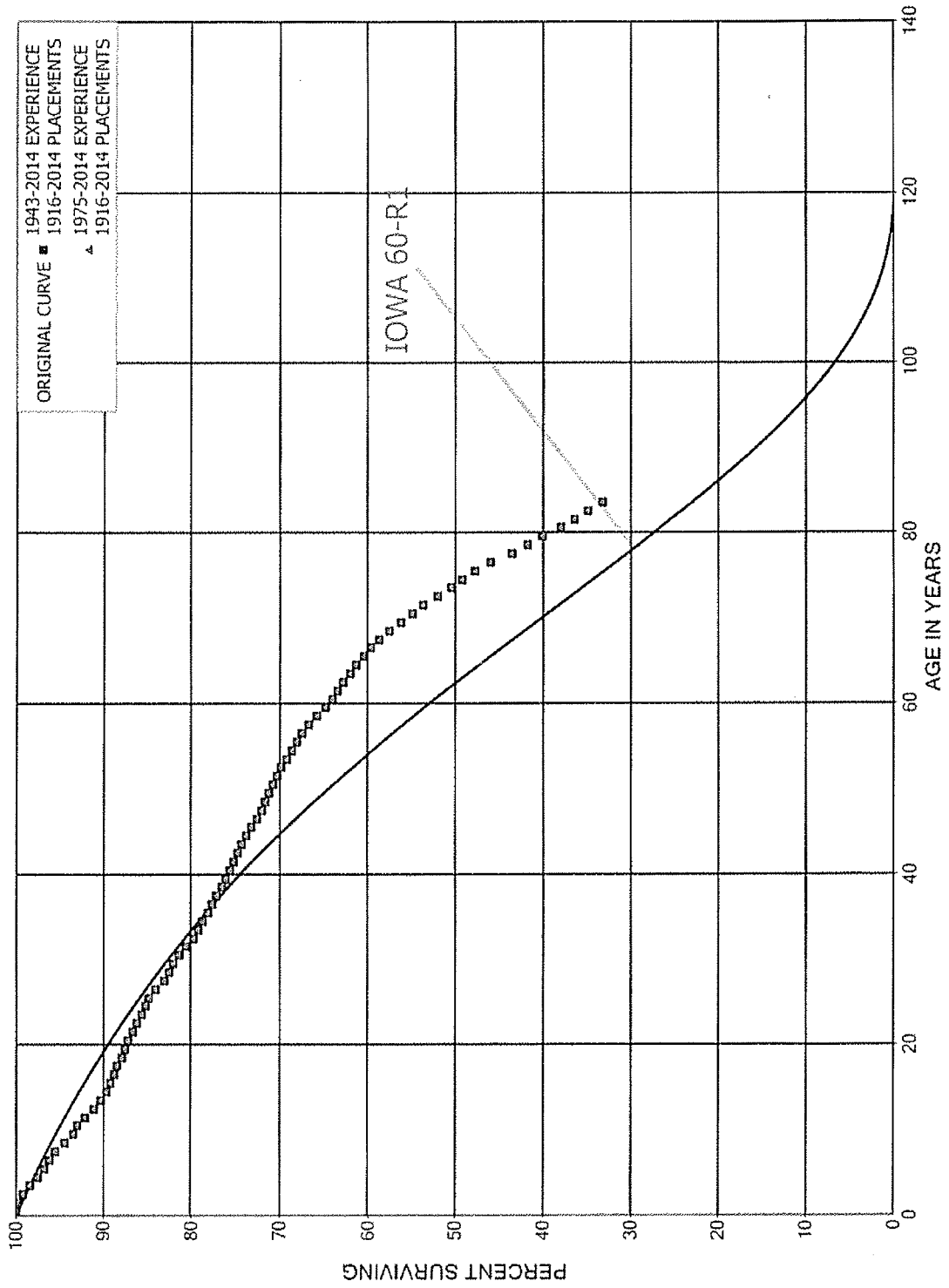
PENNSYLVANIA POWER COMPANY

ACCOUNT 364 POLES, TOWERS AND FIXTURES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1907-2014			EXPERIENCE BAND 1943-2014			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
79.5	2,026	158	0.0782	0.9218	7.35	
80.5	1,516	44	0.0290	0.9710	6.78	
81.5	1,277	33	0.0256	0.9744	6.58	
82.5	992	4	0.0044	0.9956	6.41	
83.5	980	6	0.0057	0.9943	6.38	
84.5	955	7	0.0071	0.9929	6.35	
85.5	876	1	0.0012	0.9988	6.30	
86.5	105		0.0000	1.0000	6.29	
87.5					6.29	

PENNSYLVANIA POWER COMPANY
ACCOUNT 365 OVERHEAD CONDUCTORS AND DEVICES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA POWER COMPANY

ACCOUNT 365 OVERHEAD CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1916-2014			EXPERIENCE BAND 1943-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	150,658,332	15,923	0.0001	0.9999	100.00
0.5	138,483,486	288,727	0.0021	0.9979	99.99
1.5	117,966,304	724,905	0.0061	0.9939	99.78
2.5	108,636,682	880,606	0.0081	0.9919	99.17
3.5	99,370,880	887,586	0.0089	0.9911	98.36
4.5	78,880,634	582,685	0.0074	0.9926	97.49
5.5	74,126,489	486,087	0.0066	0.9934	96.77
6.5	59,808,093	416,836	0.0070	0.9930	96.13
7.5	54,027,499	576,912	0.0107	0.9893	95.46
8.5	49,856,518	546,588	0.0110	0.9890	94.44
9.5	44,882,882	224,251	0.0050	0.9950	93.41
10.5	41,563,049	374,321	0.0090	0.9910	92.94
11.5	38,631,384	444,687	0.0115	0.9885	92.10
12.5	36,289,876	305,983	0.0084	0.9916	91.04
13.5	34,736,188	248,706	0.0072	0.9928	90.27
14.5	33,020,573	165,875	0.0050	0.9950	89.63
15.5	31,181,053	140,019	0.0045	0.9955	89.18
16.5	29,465,137	125,292	0.0043	0.9957	88.78
17.5	27,555,973	159,522	0.0058	0.9942	88.40
18.5	24,901,370	93,729	0.0038	0.9962	87.89
19.5	22,140,878	91,317	0.0041	0.9959	87.56
20.5	20,430,686	127,061	0.0062	0.9938	87.20
21.5	18,606,208	106,071	0.0057	0.9943	86.65
22.5	16,880,066	99,798	0.0059	0.9941	86.16
23.5	15,059,780	76,923	0.0051	0.9949	85.65
24.5	13,737,218	66,342	0.0048	0.9952	85.21
25.5	12,887,644	108,465	0.0084	0.9916	84.80
26.5	12,069,558	148,647	0.0123	0.9877	84.09
27.5	11,735,606	78,637	0.0067	0.9933	83.05
28.5	11,310,045	64,465	0.0057	0.9943	82.50
29.5	10,397,204	79,500	0.0076	0.9924	82.03
30.5	9,941,843	93,260	0.0094	0.9906	81.40
31.5	9,756,851	112,902	0.0116	0.9884	80.63
32.5	9,543,815	65,365	0.0068	0.9932	79.70
33.5	9,214,877	56,380	0.0061	0.9939	79.16
34.5	8,782,411	68,041	0.0077	0.9923	78.67
35.5	8,564,195	50,487	0.0059	0.9941	78.06
36.5	8,268,123	50,003	0.0060	0.9940	77.60
37.5	8,122,290	60,484	0.0074	0.9926	77.13
38.5	7,947,527	53,513	0.0067	0.9933	76.56

PENNSYLVANIA POWER COMPANY

ACCOUNT 365 OVERHEAD CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1916-2014			EXPERIENCE BAND 1943-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	7,793,075	48,866	0.0063	0.9937	76.04
40.5	7,571,362	37,997	0.0050	0.9950	75.57
41.5	7,217,917	47,981	0.0066	0.9934	75.19
42.5	6,932,465	40,071	0.0058	0.9942	74.69
43.5	6,569,411	45,186	0.0069	0.9931	74.26
44.5	6,314,359	46,625	0.0074	0.9926	73.74
45.5	5,991,164	57,203	0.0095	0.9905	73.20
46.5	5,626,469	44,949	0.0080	0.9920	72.50
47.5	5,259,499	25,224	0.0048	0.9952	71.92
48.5	4,831,225	26,845	0.0056	0.9944	71.58
49.5	4,466,436	26,519	0.0059	0.9941	71.18
50.5	4,126,805	25,192	0.0061	0.9939	70.76
51.5	3,805,937	27,448	0.0072	0.9928	70.32
52.5	3,370,535	31,964	0.0095	0.9905	69.82
53.5	3,089,192	25,197	0.0082	0.9918	69.16
54.5	2,823,347	21,604	0.0077	0.9923	68.59
55.5	2,547,308	22,941	0.0090	0.9910	68.07
56.5	2,319,250	23,347	0.0101	0.9899	67.45
57.5	2,024,796	29,380	0.0145	0.9855	66.77
58.5	1,816,070	25,656	0.0141	0.9859	65.81
59.5	1,621,516	19,521	0.0120	0.9880	64.88
60.5	1,393,359	13,152	0.0094	0.9906	64.09
61.5	1,188,600	11,352	0.0096	0.9904	63.49
62.5	1,031,734	12,798	0.0124	0.9876	62.88
63.5	880,891	9,651	0.0110	0.9890	62.10
64.5	727,179	10,700	0.0147	0.9853	61.42
65.5	617,230	8,573	0.0139	0.9861	60.52
66.5	503,783	8,280	0.0164	0.9836	59.68
67.5	427,532	8,317	0.0195	0.9805	58.70
68.5	386,731	8,999	0.0233	0.9767	57.56
69.5	358,355	8,690	0.0243	0.9757	56.22
70.5	345,337	7,459	0.0216	0.9784	54.85
71.5	332,631	10,994	0.0331	0.9669	53.67
72.5	316,849	8,886	0.0280	0.9720	51.89
73.5	273,985	6,857	0.0250	0.9750	50.44
74.5	236,173	7,145	0.0303	0.9697	49.18
75.5	205,650	7,322	0.0356	0.9644	47.69
76.5	163,881	8,922	0.0544	0.9456	45.99
77.5	118,325	4,795	0.0405	0.9595	43.49
78.5	100,307	4,106	0.0409	0.9591	41.73

PENNSYLVANIA POWER COMPANY
 ACCOUNT 365 OVERHEAD CONDUCTORS AND DEVICES
 ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1916-2014			EXPERIENCE BAND 1943-2014			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
79.5	87,144	4,430	0.0508	0.9492	40.02	
80.5	76,408	3,165	0.0414	0.9586	37.98	
81.5	69,098	2,922	0.0423	0.9577	36.41	
82.5	61,601	3,040	0.0493	0.9507	34.87	
83.5	47,016	2,477	0.0527	0.9473	33.15	
84.5	26,293	1,438	0.0547	0.9453	31.40	
85.5	15,373	896	0.0583	0.9417	29.69	
86.5	5,724	569	0.0994	0.9006	27.95	
87.5	3,124	519	0.1663	0.8337	25.18	
88.5					20.99	

PENNSYLVANIA POWER COMPANY

ACCOUNT 365 OVERHEAD CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1916-2014

EXPERIENCE BAND 1975-2014

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	146,890,793	11,674	0.0001	0.9999	100.00
0.5	135,248,953	268,519	0.0020	0.9980	99.99
1.5	115,394,119	719,928	0.0062	0.9938	99.79
2.5	106,612,670	875,367	0.0082	0.9918	99.17
3.5	97,988,194	883,691	0.0090	0.9910	98.36
4.5	77,941,313	580,287	0.0074	0.9926	97.47
5.5	73,701,554	485,522	0.0066	0.9934	96.74
6.5	59,788,701	416,836	0.0070	0.9930	96.11
7.5	54,008,196	576,912	0.0107	0.9893	95.44
8.5	49,837,215	546,588	0.0110	0.9890	94.42
9.5	44,863,563	224,251	0.0050	0.9950	93.38
10.5	41,544,562	374,321	0.0090	0.9910	92.91
11.5	38,612,926	444,687	0.0115	0.9885	92.08
12.5	36,267,321	305,983	0.0084	0.9916	91.02
13.5	34,712,552	248,706	0.0072	0.9928	90.25
14.5	32,996,937	165,875	0.0050	0.9950	89.60
15.5	31,158,558	140,019	0.0045	0.9955	89.15
16.5	29,442,925	125,292	0.0043	0.9957	88.75
17.5	27,546,580	159,522	0.0058	0.9942	88.37
18.5	24,894,178	93,729	0.0038	0.9962	87.86
19.5	22,133,723	91,317	0.0041	0.9959	87.53
20.5	20,423,530	127,061	0.0062	0.9938	87.17
21.5	18,599,227	106,071	0.0057	0.9943	86.63
22.5	16,873,873	99,798	0.0059	0.9941	86.13
23.5	15,053,661	76,923	0.0051	0.9949	85.62
24.5	13,731,119	66,342	0.0048	0.9952	85.19
25.5	12,881,553	108,465	0.0084	0.9916	84.78
26.5	12,061,022	148,647	0.0123	0.9877	84.06
27.5	11,727,071	78,637	0.0067	0.9933	83.03
28.5	11,302,239	64,465	0.0057	0.9943	82.47
29.5	10,389,398	79,500	0.0077	0.9923	82.00
30.5	9,934,037	93,260	0.0094	0.9906	81.37
31.5	9,749,055	112,902	0.0116	0.9884	80.61
32.5	9,536,025	65,365	0.0069	0.9931	79.67
33.5	9,207,088	56,380	0.0061	0.9939	79.13
34.5	8,774,634	68,041	0.0078	0.9922	78.64
35.5	8,556,418	50,487	0.0059	0.9941	78.03
36.5	8,260,346	50,003	0.0061	0.9939	77.57
37.5	8,114,568	60,484	0.0075	0.9925	77.10
38.5	7,939,805	53,513	0.0067	0.9933	76.53

PENNSYLVANIA POWER COMPANY

ACCOUNT 365 OVERHEAD CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1916-2014			EXPERIENCE BAND 1975-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	7,785,353	48,866	0.0063	0.9937	76.01
40.5	7,563,640	37,997	0.0050	0.9950	75.54
41.5	7,210,212	47,981	0.0067	0.9933	75.16
42.5	6,924,760	40,071	0.0058	0.9942	74.66
43.5	6,561,707	45,186	0.0069	0.9931	74.22
44.5	6,310,774	46,625	0.0074	0.9926	73.71
45.5	5,988,674	57,203	0.0096	0.9904	73.17
46.5	5,623,979	44,949	0.0080	0.9920	72.47
47.5	5,257,054	25,224	0.0048	0.9952	71.89
48.5	4,828,780	26,845	0.0056	0.9944	71.55
49.5	4,463,991	26,519	0.0059	0.9941	71.15
50.5	4,124,361	25,192	0.0061	0.9939	70.72
51.5	3,803,493	27,448	0.0072	0.9928	70.29
52.5	3,368,091	31,964	0.0095	0.9905	69.79
53.5	3,086,747	25,197	0.0082	0.9918	69.12
54.5	2,820,902	21,604	0.0077	0.9923	68.56
55.5	2,544,863	22,941	0.0090	0.9910	68.03
56.5	2,316,805	23,347	0.0101	0.9899	67.42
57.5	2,022,352	29,380	0.0145	0.9855	66.74
58.5	1,816,070	25,656	0.0141	0.9859	65.77
59.5	1,621,516	19,521	0.0120	0.9880	64.84
60.5	1,393,359	13,152	0.0094	0.9906	64.06
61.5	1,188,600	11,352	0.0096	0.9904	63.46
62.5	1,031,734	12,798	0.0124	0.9876	62.85
63.5	880,891	9,651	0.0110	0.9890	62.07
64.5	727,179	10,700	0.0147	0.9853	61.39
65.5	617,230	8,573	0.0139	0.9861	60.49
66.5	503,783	8,280	0.0164	0.9836	59.65
67.5	427,532	8,317	0.0195	0.9805	58.67
68.5	386,731	8,999	0.0233	0.9767	57.53
69.5	358,355	8,690	0.0243	0.9757	56.19
70.5	345,337	7,459	0.0216	0.9784	54.83
71.5	332,631	10,994	0.0331	0.9669	53.64
72.5	316,849	8,886	0.0280	0.9720	51.87
73.5	273,985	6,857	0.0250	0.9750	50.41
74.5	236,173	7,145	0.0303	0.9697	49.15
75.5	205,650	7,322	0.0356	0.9644	47.66
76.5	163,881	8,922	0.0544	0.9456	45.97
77.5	118,325	4,795	0.0405	0.9595	43.46
78.5	100,307	4,106	0.0409	0.9591	41.70

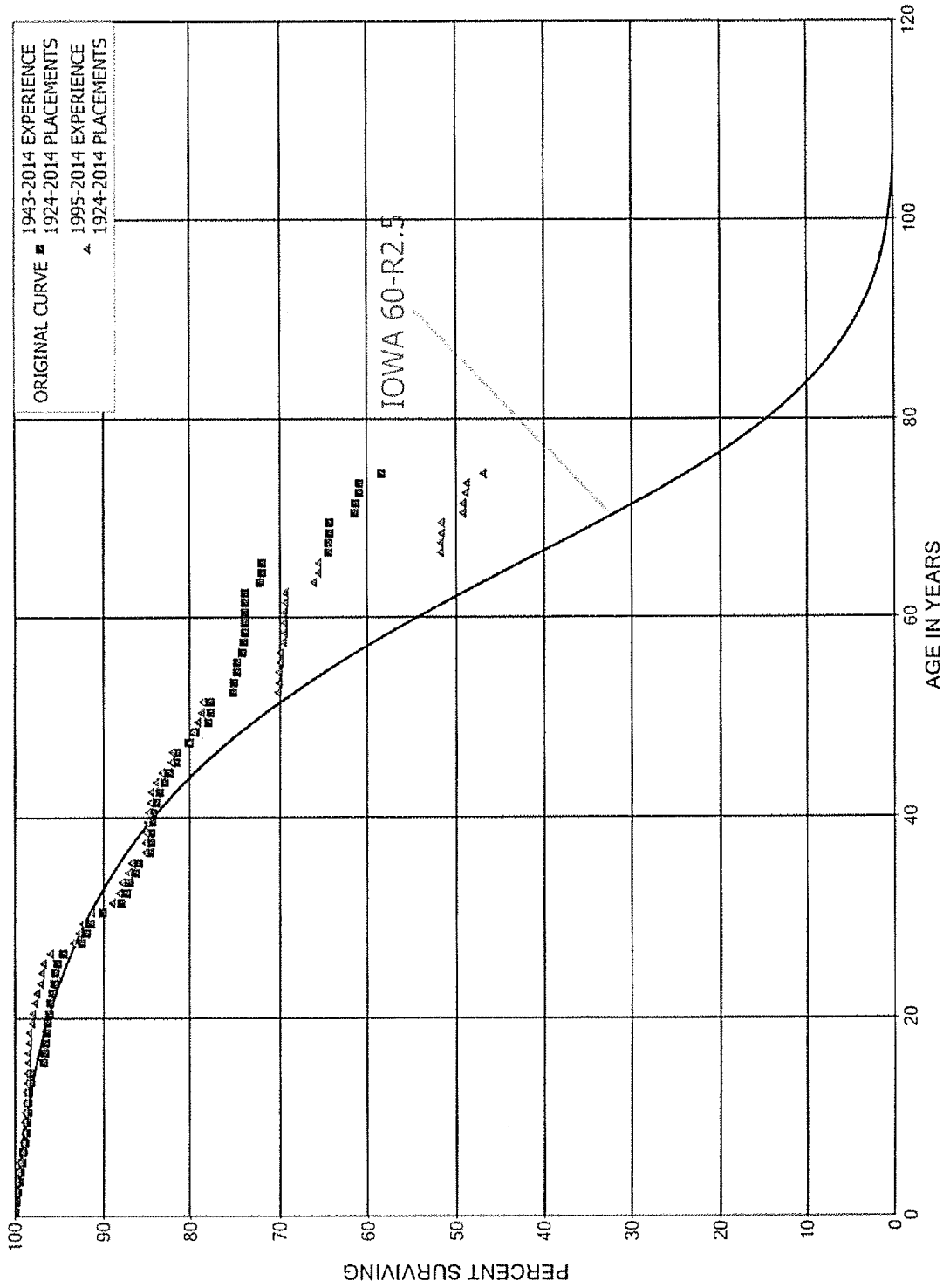
PENNSYLVANIA POWER COMPANY

ACCOUNT 365 OVERHEAD CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1916-2014			EXPERIENCE BAND 1975-2014			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
79.5	87,144	4,430	0.0508	0.9492	40.00	
80.5	76,408	3,165	0.0414	0.9586	37.96	
81.5	69,098	2,922	0.0423	0.9577	36.39	
82.5	61,601	3,040	0.0493	0.9507	34.85	
83.5	47,016	2,477	0.0527	0.9473	33.13	
84.5	26,293	1,438	0.0547	0.9453	31.39	
85.5	15,373	896	0.0583	0.9417	29.67	
86.5	5,724	569	0.0994	0.9006	27.94	
87.5	3,124	519	0.1663	0.8337	25.16	
88.5					20.98	

PENNSYLVANIA POWER COMPANY
 ACCOUNT 366 UNDERGROUND CONDUIT
 ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA POWER COMPANY

ACCOUNT 366 UNDERGROUND CONDUIT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1924-2014

EXPERIENCE BAND 1943-2014

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	8,035,641	30	0.0000	1.0000	100.00
0.5	7,807,692	10,132	0.0013	0.9987	100.00
1.5	6,911,556	12,673	0.0018	0.9982	99.87
2.5	6,287,831	9,604	0.0015	0.9985	99.69
3.5	6,672,554	7,731	0.0012	0.9988	99.53
4.5	6,210,014	13,481	0.0022	0.9978	99.42
5.5	6,286,391	11,143	0.0018	0.9982	99.20
6.5	6,134,777	12,617	0.0021	0.9979	99.03
7.5	6,025,331	3,404	0.0006	0.9994	98.82
8.5	5,834,647	8,628	0.0015	0.9985	98.77
9.5	5,658,301	4,345	0.0008	0.9992	98.62
10.5	5,471,534	3,930	0.0007	0.9993	98.55
11.5	5,228,620	5,793	0.0011	0.9989	98.48
12.5	5,125,548	8,196	0.0016	0.9984	98.37
13.5	4,918,446	4,108	0.0008	0.9992	98.21
14.5	4,764,250	67,942	0.0143	0.9857	98.13
15.5	4,321,474	6,871	0.0016	0.9984	96.73
16.5	3,817,695	2,844	0.0007	0.9993	96.57
17.5	3,357,645	1,813	0.0005	0.9995	96.50
18.5	2,559,011	3,997	0.0016	0.9984	96.45
19.5	1,976,777	5,169	0.0026	0.9974	96.30
20.5	1,482,914	2,186	0.0015	0.9985	96.05
21.5	1,403,430	2,150	0.0015	0.9985	95.91
22.5	1,317,326	3,655	0.0028	0.9972	95.76
23.5	1,259,536	1,218	0.0010	0.9990	95.49
24.5	1,203,710	2,909	0.0024	0.9976	95.40
25.5	1,156,477	8,109	0.0070	0.9930	95.17
26.5	1,102,887	24,368	0.0221	0.9779	94.50
27.5	1,057,584	7,069	0.0067	0.9933	92.41
28.5	1,001,187	4,834	0.0048	0.9952	91.80
29.5	975,120	13,874	0.0142	0.9858	91.35
30.5	944,192	21,945	0.0232	0.9768	90.05
31.5	899,503	6,788	0.0075	0.9925	87.96
32.5	861,881	3,060	0.0036	0.9964	87.30
33.5	831,241	6,477	0.0078	0.9922	86.99
34.5	806,707	3,599	0.0045	0.9955	86.31
35.5	763,846	11,678	0.0153	0.9847	85.92
36.5	717,739	500	0.0007	0.9993	84.61
37.5	710,320	555	0.0008	0.9992	84.55
38.5	681,952	954	0.0014	0.9986	84.49

PENNSYLVANIA POWER COMPANY

ACCOUNT 366 UNDERGROUND CONDUIT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1924-2014			EXPERIENCE BAND 1943-2014			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
39.5	598,855	504	0.0008	0.9992	84.37	
40.5	419,260	1,988	0.0047	0.9953	84.30	
41.5	360,515	1,722	0.0048	0.9952	83.90	
42.5	337,743	2,017	0.0060	0.9940	83.50	
43.5	265,103	1,790	0.0068	0.9932	83.00	
44.5	163,524	1,642	0.0100	0.9900	82.44	
45.5	149,657	113	0.0008	0.9992	81.61	
46.5	137,181	2,300	0.0168	0.9832	81.55	
47.5	109,764	1,019	0.0093	0.9907	80.18	
48.5	100,345	1,905	0.0190	0.9810	79.44	
49.5	73,598	150	0.0020	0.9980	77.93	
50.5	73,448	4	0.0001	0.9999	77.77	
51.5	73,445	2,494	0.0340	0.9660	77.77	
52.5	70,951	16	0.0002	0.9998	75.12	
53.5	70,935	318	0.0045	0.9955	75.11	
54.5	70,596	16	0.0002	0.9998	74.77	
55.5	69,932	547	0.0078	0.9922	74.75	
56.5	66,944	224	0.0034	0.9966	74.17	
57.5	51,900	21	0.0004	0.9996	73.92	
58.5	50,640		0.0000	1.0000	73.89	
59.5	50,609		0.0000	1.0000	73.89	
60.5	50,609	42	0.0008	0.9992	73.89	
61.5	50,568		0.0000	1.0000	73.83	
62.5	50,568	1,100	0.0218	0.9782	73.83	
63.5	49,467	202	0.0041	0.9959	72.22	
64.5	49,265	20	0.0004	0.9996	71.93	
65.5	48,807	5,026	0.1030	0.8970	71.90	
66.5	45,863		0.0000	1.0000	64.49	
67.5	45,863	52	0.0011	0.9989	64.49	
68.5	45,811	8	0.0002	0.9998	64.42	
69.5	46,441	2,127	0.0458	0.9542	64.41	
70.5	44,314	16	0.0004	0.9996	61.46	
71.5	44,297	320	0.0072	0.9928	61.44	
72.5	43,562	68	0.0016	0.9984	60.99	
73.5	43,494	1,754	0.0403	0.9597	60.90	
74.5	25,608		0.0000	1.0000	58.44	
75.5	25,608	1,086	0.0424	0.9576	58.44	
76.5	24,412	208	0.0085	0.9915	55.96	
77.5	24,205		0.0000	1.0000	55.49	
78.5	24,205	4,099	0.1693	0.8307	55.49	

PENNSYLVANIA POWER COMPANY
ACCOUNT 366 UNDERGROUND CONDUIT
ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1924-2014			EXPERIENCE BAND 1943-2014			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
79.5	20,106	176	0.0088	0.9912	46.09	
80.5	19,930	210	0.0105	0.9895	45.69	
81.5	19,720		0.0000	1.0000	45.21	
82.5	19,720	2	0.0001	0.9999	45.21	
83.5	19,718	23	0.0012	0.9988	45.20	
84.5	18,559	477	0.0257	0.9743	45.15	
85.5	18,082	21	0.0011	0.9989	43.99	
86.5	18,061	998	0.0552	0.9448	43.94	
87.5	1,025		0.0000	1.0000	41.51	
88.5	1,025		0.0000	1.0000	41.51	
89.5	1,025		0.0000	1.0000	41.51	
90.5					41.51	

PENNSYLVANIA POWER COMPANY

ACCOUNT 366 UNDERGROUND CONDUIT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1924-2014			EXPERIENCE BAND 1995-2014			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
0.0	5,866,193	30	0.0000	1.0000	100.00	
0.5	5,943,929	1,077	0.0002	0.9998	100.00	
1.5	5,400,435	12,673	0.0023	0.9977	99.98	
2.5	4,834,063	3,591	0.0007	0.9993	99.75	
3.5	5,280,736	6,079	0.0012	0.9988	99.67	
4.5	4,876,817	12,299	0.0025	0.9975	99.56	
5.5	4,999,152	10,097	0.0020	0.9980	99.31	
6.5	4,926,170	10,137	0.0021	0.9979	99.11	
7.5	4,841,105	2,486	0.0005	0.9995	98.90	
8.5	4,702,775	3,127	0.0007	0.9993	98.85	
9.5	4,554,440	3,480	0.0008	0.9992	98.79	
10.5	4,388,164	3,283	0.0007	0.9993	98.71	
11.5	4,137,741	3,085	0.0007	0.9993	98.64	
12.5	4,041,692	1,928	0.0005	0.9995	98.56	
13.5	3,930,695	1,176	0.0003	0.9997	98.52	
14.5	3,800,749	2,117	0.0006	0.9994	98.49	
15.5	3,410,514	2,980	0.0009	0.9991	98.43	
16.5	2,973,431	1,305	0.0004	0.9996	98.35	
17.5	2,524,518	1,772	0.0007	0.9993	98.30	
18.5	1,756,066	3,997	0.0023	0.9977	98.23	
19.5	1,265,879	2,575	0.0020	0.9980	98.01	
20.5	982,199	2,186	0.0022	0.9978	97.81	
21.5	966,781	2,150	0.0022	0.9978	97.59	
22.5	912,016	3,655	0.0040	0.9960	97.38	
23.5	935,584	1,218	0.0013	0.9987	96.99	
24.5	1,003,172	2,773	0.0028	0.9972	96.86	
25.5	971,697	8,081	0.0083	0.9917	96.59	
26.5	932,458	24,307	0.0261	0.9739	95.79	
27.5	920,018	6,327	0.0069	0.9931	93.29	
28.5	875,204	4,834	0.0055	0.9945	92.65	
29.5	883,944	9,533	0.0108	0.9892	92.14	
30.5	857,357	21,945	0.0256	0.9744	91.14	
31.5	812,668	6,788	0.0084	0.9916	88.81	
32.5	775,046	3,060	0.0039	0.9961	88.07	
33.5	744,406	6,477	0.0087	0.9913	87.72	
34.5	719,908	3,103	0.0043	0.9957	86.96	
35.5	678,395	11,678	0.0172	0.9828	86.58	
36.5	636,929	500	0.0008	0.9992	85.09	
37.5	646,142	476	0.0007	0.9993	85.03	
38.5	620,523	954	0.0015	0.9985	84.96	

PENNSYLVANIA POWER COMPANY

ACCOUNT 366 UNDERGROUND CONDUIT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1924-2014

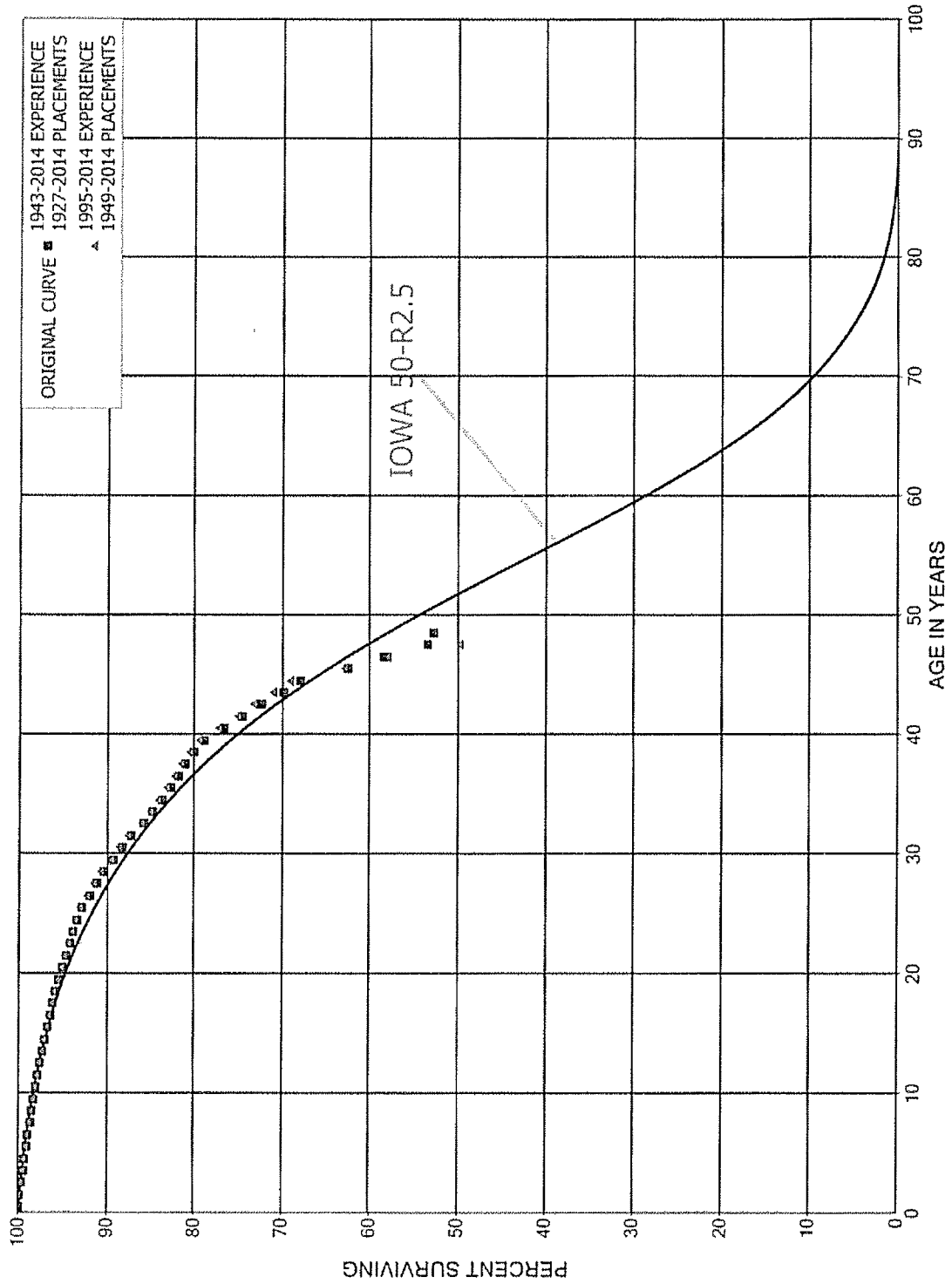
EXPERIENCE BAND 1995-2014

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	537,498	504	0.0009	0.9991	84.83
40.5	360,039	1,241	0.0034	0.9966	84.75
41.5	302,041	51	0.0002	0.9998	84.46
42.5	280,940	2,017	0.0072	0.9928	84.45
43.5	208,300	1,790	0.0086	0.9914	83.84
44.5	106,721	1,336	0.0125	0.9875	83.12
45.5	96,333	113	0.0012	0.9988	82.08
46.5	84,254	2,195	0.0260	0.9740	81.98
47.5	56,942	259	0.0046	0.9954	79.85
48.5	48,283	244	0.0051	0.9949	79.48
49.5	23,197	150	0.0064	0.9936	79.08
50.5	23,047	4	0.0002	0.9998	78.57
51.5	23,043	2,494	0.1082	0.8918	78.56
52.5	21,223	16	0.0008	0.9992	70.06
53.5	21,207	33	0.0016	0.9984	70.00
54.5	43,575	16	0.0004	0.9996	69.89
55.5	42,729	16	0.0004	0.9996	69.87
56.5	40,454	224	0.0055	0.9945	69.84
57.5	25,410	21	0.0008	0.9992	69.45
58.5	24,150		0.0000	1.0000	69.39
59.5	24,119		0.0000	1.0000	69.39
60.5	24,119	42	0.0017	0.9983	69.39
61.5	24,078		0.0000	1.0000	69.27
62.5	24,078	1,100	0.0457	0.9543	69.27
63.5	22,977	202	0.0088	0.9912	66.11
64.5	24,111	20	0.0008	0.9992	65.53
65.5	23,653	5,026	0.2125	0.7875	65.47
66.5	18,230		0.0000	1.0000	51.56
67.5	45,476	52	0.0011	0.9989	51.56
68.5	45,424	8	0.0002	0.9998	51.50
69.5	45,416	2,127	0.0468	0.9532	51.49
70.5	44,314	16	0.0004	0.9996	49.08
71.5	44,297	320	0.0072	0.9928	49.06
72.5	43,562	68	0.0016	0.9984	48.71
73.5	43,494	1,754	0.0403	0.9597	48.63
74.5	25,608		0.0000	1.0000	46.67
75.5	25,608	1,086	0.0424	0.9576	46.67
76.5	24,412	208	0.0085	0.9915	44.69
77.5	24,205		0.0000	1.0000	44.31
78.5	24,205	4,099	0.1693	0.8307	44.31

PENNSYLVANIA POWER COMPANY
ACCOUNT 366 UNDERGROUND CONDUIT
ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1924-2014			EXPERIENCE BAND 1995-2014			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
79.5	20,106	176	0.0088	0.9912	36.81	
80.5	19,930	210	0.0105	0.9895	36.49	
81.5	19,720		0.0000	1.0000	36.10	
82.5	19,720	2	0.0001	0.9999	36.10	
83.5	19,718	23	0.0012	0.9988	36.10	
84.5	18,559	477	0.0257	0.9743	36.06	
85.5	18,082	21	0.0011	0.9989	35.13	
86.5	18,061	998	0.0552	0.9448	35.09	
87.5	1,025		0.0000	1.0000	33.15	
88.5	1,025		0.0000	1.0000	33.15	
89.5	1,025		0.0000	1.0000	33.15	
90.5					33.15	

PENNSYLVANIA POWER COMPANY
ACCOUNT 367 UNDERGROUND CONDUCTORS AND DEVICES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA POWER COMPANY

ACCOUNT 367 UNDERGROUND CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1927-2014			EXPERIENCE BAND 1943-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	58,026,589	3,975	0.0001	0.9999	100.00
0.5	55,681,613	113,238	0.0020	0.9980	99.99
1.5	56,790,917	118,275	0.0021	0.9979	99.79
2.5	51,968,097	117,615	0.0023	0.9977	99.58
3.5	49,718,999	62,550	0.0013	0.9987	99.36
4.5	43,200,393	65,562	0.0015	0.9985	99.23
5.5	43,504,355	59,834	0.0014	0.9986	99.08
6.5	43,924,797	122,786	0.0028	0.9972	98.94
7.5	42,784,012	91,951	0.0021	0.9979	98.67
8.5	40,965,012	80,398	0.0020	0.9980	98.46
9.5	38,809,753	89,348	0.0023	0.9977	98.26
10.5	37,235,685	73,694	0.0020	0.9980	98.04
11.5	35,369,824	102,021	0.0029	0.9971	97.84
12.5	33,826,683	83,830	0.0025	0.9975	97.56
13.5	32,578,419	88,733	0.0027	0.9973	97.32
14.5	31,221,763	93,319	0.0030	0.9970	97.05
15.5	25,513,801	84,368	0.0033	0.9967	96.76
16.5	22,690,951	66,132	0.0029	0.9971	96.44
17.5	20,646,825	60,196	0.0029	0.9971	96.16
18.5	19,462,459	81,510	0.0042	0.9958	95.88
19.5	18,230,458	80,695	0.0044	0.9956	95.48
20.5	14,705,812	60,267	0.0041	0.9959	95.06
21.5	12,558,694	60,689	0.0048	0.9952	94.67
22.5	10,960,115	48,350	0.0044	0.9956	94.21
23.5	9,730,347	42,969	0.0044	0.9956	93.80
24.5	8,520,494	51,858	0.0061	0.9939	93.38
25.5	7,636,743	67,285	0.0088	0.9912	92.81
26.5	6,333,193	52,956	0.0084	0.9916	91.99
27.5	5,594,058	51,859	0.0093	0.9907	91.23
28.5	4,816,607	58,833	0.0122	0.9878	90.38
29.5	4,348,533	47,215	0.0109	0.9891	89.28
30.5	3,830,609	44,985	0.0117	0.9883	88.31
31.5	3,455,283	58,948	0.0171	0.9829	87.27
32.5	3,140,864	34,742	0.0111	0.9889	85.78
33.5	2,669,957	34,461	0.0129	0.9871	84.83
34.5	2,307,790	28,708	0.0124	0.9876	83.74
35.5	1,998,716	20,325	0.0102	0.9898	82.70
36.5	1,809,562	17,276	0.0095	0.9905	81.85
37.5	1,702,154	20,662	0.0121	0.9879	81.07
38.5	1,511,869	24,291	0.0161	0.9839	80.09

PENNSYLVANIA POWER COMPANY

ACCOUNT 367 UNDERGROUND CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1927-2014			EXPERIENCE BAND 1943-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,181,835	32,304	0.0273	0.9727	78.80
40.5	964,951	27,561	0.0286	0.9714	76.65
41.5	715,435	21,260	0.0297	0.9703	74.46
42.5	438,057	14,892	0.0340	0.9660	72.25
43.5	248,405	6,617	0.0266	0.9734	69.79
44.5	100,924	8,048	0.0797	0.9203	67.93
45.5	69,614	4,535	0.0651	0.9349	62.51
46.5	29,252	2,512	0.0859	0.9141	58.44
47.5	11,576	160	0.0138	0.9862	53.42
48.5	11,416	4,657	0.4079	0.5921	52.68
49.5	6,759		0.0000	1.0000	31.19
50.5	6,759	3,956	0.5853	0.4147	31.19
51.5	2,803	1,403	0.5005	0.4995	12.94
52.5	1,400		0.0000	1.0000	6.46
53.5	1,400	1,400	1.0000		6.46
54.5					

PENNSYLVANIA POWER COMPANY

ACCOUNT 367 UNDERGROUND CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1949-2014			EXPERIENCE BAND 1995-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	42,067,334	1,511	0.0000	1.0000	100.00
0.5	44,325,118	79,937	0.0018	0.9982	100.00
1.5	44,216,707	106,756	0.0024	0.9976	99.82
2.5	40,270,582	76,681	0.0019	0.9981	99.58
3.5	39,314,179	53,787	0.0014	0.9986	99.39
4.5	34,050,154	47,011	0.0014	0.9986	99.25
5.5	35,263,675	46,282	0.0013	0.9987	99.11
6.5	37,024,153	106,708	0.0029	0.9971	98.98
7.5	36,639,923	87,233	0.0024	0.9976	98.70
8.5	35,614,796	77,942	0.0022	0.9978	98.46
9.5	33,910,807	69,130	0.0020	0.9980	98.25
10.5	32,875,007	69,417	0.0021	0.9979	98.05
11.5	31,377,667	81,531	0.0026	0.9974	97.84
12.5	30,149,390	78,745	0.0026	0.9974	97.59
13.5	29,418,934	83,737	0.0028	0.9972	97.33
14.5	28,219,943	84,902	0.0030	0.9970	97.05
15.5	22,833,433	65,049	0.0028	0.9972	96.76
16.5	20,332,290	55,016	0.0027	0.9973	96.49
17.5	18,516,659	56,489	0.0031	0.9969	96.22
18.5	17,542,724	77,254	0.0044	0.9956	95.93
19.5	16,684,446	74,009	0.0044	0.9956	95.51
20.5	13,391,846	55,059	0.0041	0.9959	95.08
21.5	11,525,807	51,450	0.0045	0.9955	94.69
22.5	10,266,314	43,839	0.0043	0.9957	94.27
23.5	9,269,264	38,071	0.0041	0.9959	93.87
24.5	8,260,677	47,577	0.0058	0.9942	93.48
25.5	7,415,112	62,976	0.0085	0.9915	92.94
26.5	6,167,484	51,495	0.0083	0.9917	92.16
27.5	5,477,368	49,093	0.0090	0.9910	91.39
28.5	4,714,375	58,766	0.0125	0.9875	90.57
29.5	4,280,803	44,705	0.0104	0.9896	89.44
30.5	3,765,389	44,485	0.0118	0.9882	88.50
31.5	3,390,563	58,607	0.0173	0.9827	87.46
32.5	3,079,933	33,709	0.0109	0.9891	85.95
33.5	2,613,731	29,592	0.0113	0.9887	85.01
34.5	2,259,790	27,269	0.0121	0.9879	84.04
35.5	1,953,871	19,839	0.0102	0.9898	83.03
36.5	1,767,325	16,514	0.0093	0.9907	82.19
37.5	1,671,567	20,528	0.0123	0.9877	81.42
38.5	1,483,855	21,445	0.0145	0.9855	80.42

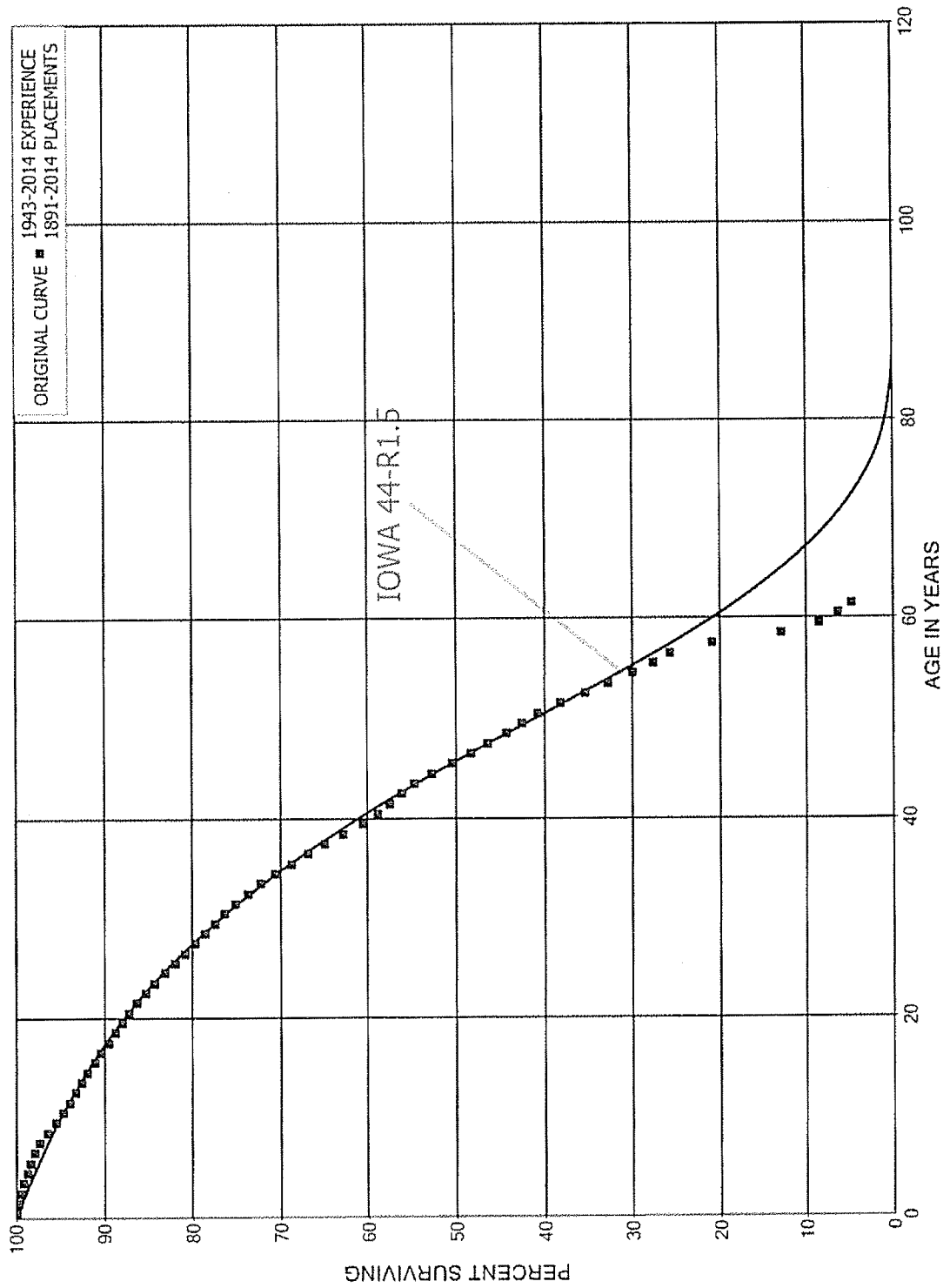
PENNSYLVANIA POWER COMPANY

ACCOUNT 367 UNDERGROUND CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1949-2014			EXPERIENCE BAND 1995-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,156,996	32,116	0.0278	0.9722	79.26
40.5	944,335	26,876	0.0285	0.9715	77.06
41.5	695,504	16,300	0.0234	0.9766	74.86
42.5	423,501	13,047	0.0308	0.9692	73.11
43.5	235,694	6,310	0.0268	0.9732	70.86
44.5	88,520	8,012	0.0905	0.9095	68.96
45.5	58,038	4,535	0.0781	0.9219	62.72
46.5	17,676	2,512	0.1421	0.8579	57.82
47.5					49.60

PENNSYLVANIA POWER COMPANY
ACCOUNT 368 LINE TRANSFORMERS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA POWER COMPANY

ACCOUNT 368 LINE TRANSFORMERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1891-2014

EXPERIENCE BAND 1943-2014

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	115,407,404	29,770	0.0003	0.9997	100.00
0.5	111,469,316	225,305	0.0020	0.9980	99.97
1.5	108,758,833	373,904	0.0034	0.9966	99.77
2.5	102,301,969	244,487	0.0024	0.9976	99.43
3.5	97,433,611	443,822	0.0046	0.9954	99.19
4.5	81,022,061	321,059	0.0040	0.9960	98.74
5.5	81,248,118	290,259	0.0036	0.9964	98.35
6.5	77,556,765	453,879	0.0059	0.9941	98.00
7.5	71,443,354	679,846	0.0095	0.9905	97.42
8.5	66,060,185	709,847	0.0107	0.9893	96.50
9.5	60,078,444	469,721	0.0078	0.9922	95.46
10.5	54,762,699	423,626	0.0077	0.9923	94.71
11.5	51,545,791	362,340	0.0070	0.9930	93.98
12.5	50,230,094	369,493	0.0074	0.9926	93.32
13.5	48,983,234	364,385	0.0074	0.9926	92.63
14.5	47,842,808	430,790	0.0090	0.9910	91.94
15.5	46,305,458	379,782	0.0082	0.9918	91.12
16.5	44,347,429	409,982	0.0092	0.9908	90.37
17.5	42,786,215	409,166	0.0096	0.9904	89.53
18.5	41,015,454	350,433	0.0085	0.9915	88.68
19.5	39,111,185	347,928	0.0089	0.9911	87.92
20.5	37,183,062	366,474	0.0099	0.9901	87.14
21.5	34,689,681	392,543	0.0113	0.9887	86.28
22.5	32,278,333	391,451	0.0121	0.9879	85.30
23.5	30,405,987	449,541	0.0148	0.9852	84.27
24.5	27,947,734	345,631	0.0124	0.9876	83.02
25.5	26,336,830	367,082	0.0139	0.9861	82.00
26.5	24,686,196	345,761	0.0140	0.9860	80.85
27.5	23,008,316	326,227	0.0142	0.9858	79.72
28.5	21,190,714	301,067	0.0142	0.9858	78.59
29.5	19,876,852	280,982	0.0141	0.9859	77.47
30.5	18,410,988	288,839	0.0157	0.9843	76.38
31.5	16,913,203	316,213	0.0187	0.9813	75.18
32.5	15,619,636	310,024	0.0198	0.9802	73.77
33.5	14,482,676	334,476	0.0231	0.9769	72.31
34.5	13,203,210	354,158	0.0268	0.9732	70.64
35.5	11,717,981	324,911	0.0277	0.9723	68.75
36.5	10,555,360	302,005	0.0286	0.9714	66.84
37.5	9,579,549	304,363	0.0318	0.9682	64.93
38.5	8,762,810	316,354	0.0361	0.9639	62.86

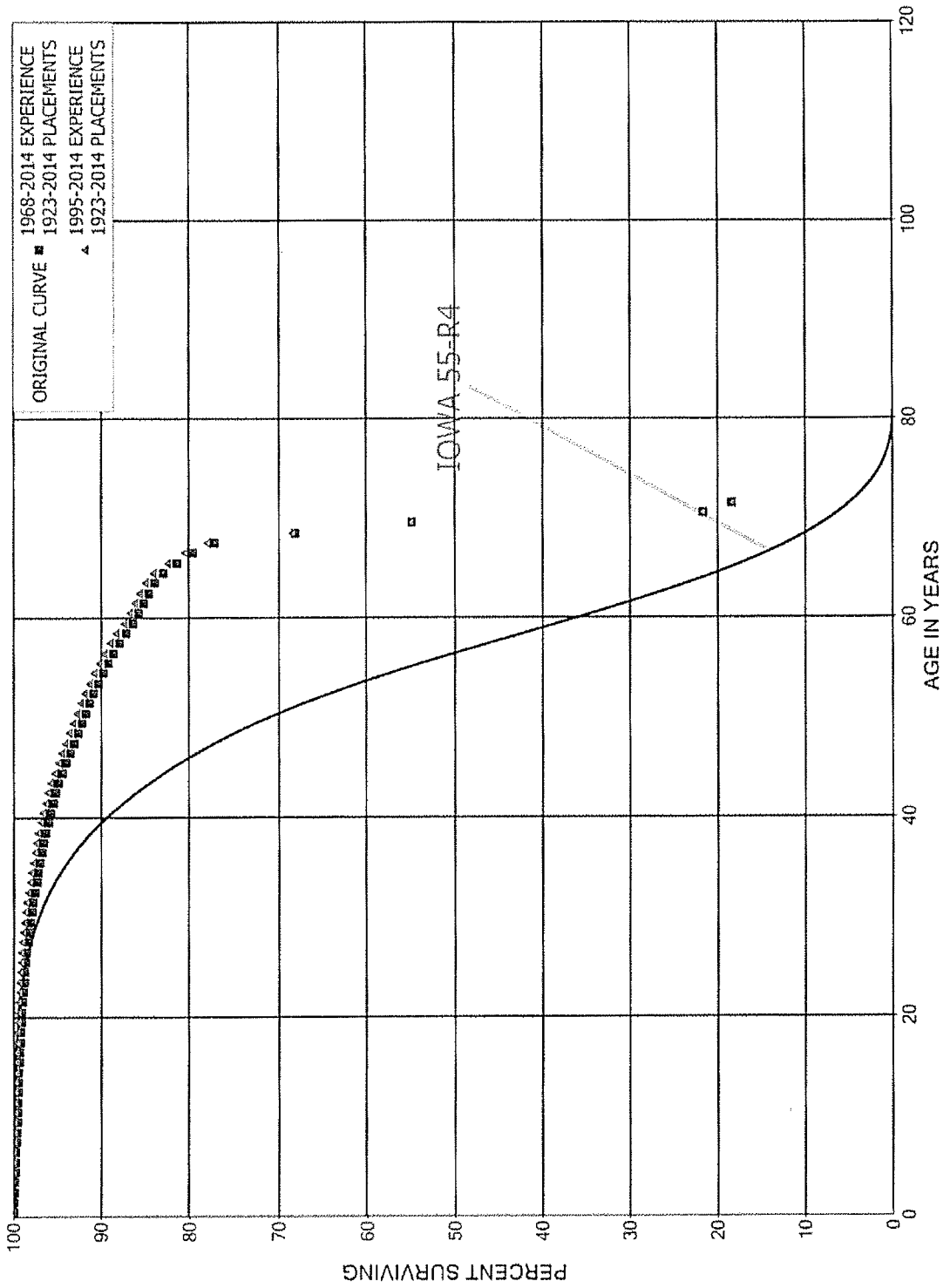
PENNSYLVANIA POWER COMPANY
ACCOUNT 368 LINE TRANSFORMERS
ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1891-2014			EXPERIENCE BAND 1943-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	8,036,495	234,696	0.0292	0.9708	60.59
40.5	7,345,488	163,329	0.0222	0.9778	58.82
41.5	6,800,893	154,423	0.0227	0.9773	57.52
42.5	6,237,606	160,472	0.0257	0.9743	56.21
43.5	5,745,597	218,777	0.0381	0.9619	54.76
44.5	5,254,873	231,678	0.0441	0.9559	52.68
45.5	4,759,614	198,886	0.0418	0.9582	50.36
46.5	4,308,497	162,344	0.0377	0.9623	48.25
47.5	3,767,315	173,661	0.0461	0.9539	46.43
48.5	3,422,867	135,305	0.0395	0.9605	44.29
49.5	3,180,133	138,606	0.0436	0.9564	42.54
50.5	2,917,734	178,892	0.0613	0.9387	40.69
51.5	2,605,932	199,694	0.0766	0.9234	38.19
52.5	2,301,240	163,634	0.0711	0.9289	35.27
53.5	2,007,070	171,343	0.0854	0.9146	32.76
54.5	1,701,023	135,478	0.0796	0.9204	29.96
55.5	1,384,712	91,933	0.0664	0.9336	27.58
56.5	1,183,063	227,273	0.1921	0.8079	25.75
57.5	864,012	329,668	0.3816	0.6184	20.80
58.5	532,250	178,948	0.3362	0.6638	12.86
59.5	353,525	94,100	0.2662	0.7338	8.54
60.5	260,765	64,291	0.2465	0.7535	6.27
61.5	189,558	68,594	0.3619	0.6381	4.72
62.5	120,595	19,017	0.1577	0.8423	3.01
63.5	99,593	587	0.0059	0.9941	2.54
64.5	99,461	8,491	0.0854	0.9146	2.52
65.5	91,604	3,023	0.0330	0.9670	2.31
66.5	76,797	3,629	0.0472	0.9528	2.23
67.5	73,504	5,352	0.0728	0.9272	2.13
68.5	64,379	6,639	0.1031	0.8969	1.97
69.5	47,072	2,017	0.0428	0.9572	1.77
70.5	43,987	5,572	0.1267	0.8733	1.69
71.5	37,366	135	0.0036	0.9964	1.48
72.5	34,331		0.0000	1.0000	1.47
73.5	34,963	249	0.0071	0.9929	1.47
74.5	34,752	2,054	0.0591	0.9409	1.46
75.5	32,614	5,713	0.1752	0.8248	1.38
76.5	26,866	1,644	0.0612	0.9388	1.13
77.5	25,149	2,377	0.0945	0.9055	1.07
78.5	22,920	3,755	0.1638	0.8362	0.96

PENNSYLVANIA POWER COMPANY
 ACCOUNT 368 LINE TRANSFORMERS
 ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1891-2014			EXPERIENCE BAND 1943-2014			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
79.5	18,049	706	0.0391	0.9609	0.81	
80.5	15,803	1,553	0.0983	0.9017	0.77	
81.5	12,710	1,060	0.0834	0.9166	0.70	
82.5	11,083	102	0.0092	0.9908	0.64	
83.5	8,450	818	0.0968	0.9032	0.63	
84.5	4,386	157	0.0358	0.9642	0.57	
85.5	729	150	0.2061	0.7939	0.55	
86.5	522	115	0.2200	0.7800	0.44	
87.5	323	193	0.5988	0.4012	0.34	
88.5	129		0.0000	1.0000	0.14	
89.5	129	112	0.8667	0.1333	0.14	
90.5	17		0.0000	1.0000	0.02	
91.5	17		0.0000	1.0000	0.02	
92.5					0.02	

PENNSYLVANIA POWER COMPANY
ACCOUNT 369 SERVICES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA POWER COMPANY

ACCOUNT 369 SERVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1923-2014

EXPERIENCE BAND 1968-2014

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	34,499,968		0.0000	1.0000	100.00
0.5	33,369,393	27,684	0.0008	0.9992	100.00
1.5	32,860,567	12,732	0.0004	0.9996	99.92
2.5	31,932,584	18,408	0.0006	0.9994	99.88
3.5	31,288,647	16,264	0.0005	0.9995	99.82
4.5	28,415,413	10,663	0.0004	0.9996	99.77
5.5	28,433,795	12,335	0.0004	0.9996	99.73
6.5	27,915,562	8,496	0.0003	0.9997	99.69
7.5	26,988,396	12,765	0.0005	0.9995	99.66
8.5	25,457,155	13,416	0.0005	0.9995	99.61
9.5	24,552,739	14,682	0.0006	0.9994	99.56
10.5	23,756,456	8,795	0.0004	0.9996	99.50
11.5	23,295,819	8,602	0.0004	0.9996	99.46
12.5	23,073,162	9,415	0.0004	0.9996	99.43
13.5	22,858,020	9,521	0.0004	0.9996	99.38
14.5	22,708,822	8,777	0.0004	0.9996	99.34
15.5	19,516,661	10,533	0.0005	0.9995	99.30
16.5	19,425,838	10,999	0.0006	0.9994	99.25
17.5	18,625,846	12,041	0.0006	0.9994	99.19
18.5	16,597,263	9,311	0.0006	0.9994	99.13
19.5	14,514,536	6,433	0.0004	0.9996	99.08
20.5	12,758,650	17,144	0.0013	0.9987	99.03
21.5	11,735,541	6,577	0.0006	0.9994	98.90
22.5	10,877,795	7,371	0.0007	0.9993	98.84
23.5	9,980,899	8,739	0.0009	0.9991	98.78
24.5	8,557,306	7,940	0.0009	0.9991	98.69
25.5	7,559,255	7,730	0.0010	0.9990	98.60
26.5	6,595,683	16,374	0.0025	0.9975	98.50
27.5	5,960,364	6,076	0.0010	0.9990	98.25
28.5	5,387,618	7,116	0.0013	0.9987	98.15
29.5	4,965,099	7,452	0.0015	0.9985	98.02
30.5	4,566,428	8,026	0.0018	0.9982	97.88
31.5	4,262,379	6,783	0.0016	0.9984	97.70
32.5	3,954,098	9,593	0.0024	0.9976	97.55
33.5	3,649,537	6,924	0.0019	0.9981	97.31
34.5	3,389,789	6,234	0.0018	0.9982	97.13
35.5	3,148,026	6,444	0.0020	0.9980	96.95
36.5	2,921,866	7,080	0.0024	0.9976	96.75
37.5	2,775,441	6,222	0.0022	0.9978	96.52
38.5	2,622,170	7,891	0.0030	0.9970	96.30

PENNSYLVANIA POWER COMPANY

ACCOUNT 369 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1923-2014			EXPERIENCE BAND 1968-2014			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
39.5	2,409,170	7,069	0.0029	0.9971	96.01	
40.5	2,134,789	6,848	0.0032	0.9968	95.73	
41.5	1,871,802	5,300	0.0028	0.9972	95.42	
42.5	1,665,282	5,983	0.0036	0.9964	95.15	
43.5	1,544,616	7,606	0.0049	0.9951	94.81	
44.5	1,450,124	6,590	0.0045	0.9955	94.34	
45.5	1,371,393	6,132	0.0045	0.9955	93.91	
46.5	1,281,377	5,741	0.0045	0.9955	93.49	
47.5	1,202,633	5,857	0.0049	0.9951	93.07	
48.5	1,120,796	5,759	0.0051	0.9949	92.62	
49.5	1,049,750	5,098	0.0049	0.9951	92.14	
50.5	983,865	4,506	0.0046	0.9954	91.70	
51.5	921,105	4,511	0.0049	0.9951	91.28	
52.5	816,521	4,475	0.0055	0.9945	90.83	
53.5	767,414	5,045	0.0066	0.9934	90.33	
54.5	719,214	4,660	0.0065	0.9935	89.74	
55.5	658,808	3,996	0.0061	0.9939	89.16	
56.5	604,876	4,405	0.0073	0.9927	88.62	
57.5	534,212	4,547	0.0085	0.9915	87.97	
58.5	460,162	4,089	0.0089	0.9911	87.22	
59.5	401,606	3,200	0.0080	0.9920	86.45	
60.5	348,328	2,288	0.0066	0.9934	85.76	
61.5	294,222	1,886	0.0064	0.9936	85.19	
62.5	245,796	2,010	0.0082	0.9918	84.65	
63.5	209,958	2,400	0.0114	0.9886	83.96	
64.5	174,908	3,364	0.0192	0.9808	83.00	
65.5	153,036	3,287	0.0215	0.9785	81.40	
66.5	128,842	4,014	0.0312	0.9688	79.65	
67.5	112,609	13,299	0.1181	0.8819	77.17	
68.5	94,018	18,305	0.1947	0.8053	68.06	
69.5	76,536	46,419	0.6065	0.3935	54.81	
70.5	31,990	4,778	0.1494	0.8506	21.57	
71.5	27,284	2,620	0.0960	0.9040	18.35	
72.5	25,841	10,105	0.3910	0.6090	16.58	
73.5	15,736	14,553	0.9248	0.0752	10.10	
74.5	1,183	1,183	1.0000		0.76	
75.5						

PENNSYLVANIA POWER COMPANY

ACCOUNT 369 SERVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1923-2014

EXPERIENCE BAND 1995-2014

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	21,832,254		0.0000	1.0000	100.00
0.5	22,220,774	1,624	0.0001	0.9999	100.00
1.5	20,882,991	3,785	0.0002	0.9998	99.99
2.5	20,879,737	11,826	0.0006	0.9994	99.97
3.5	21,141,892	10,956	0.0005	0.9995	99.92
4.5	19,697,923	6,010	0.0003	0.9997	99.87
5.5	20,733,522	6,527	0.0003	0.9997	99.84
6.5	21,293,911	5,834	0.0003	0.9997	99.80
7.5	21,091,285	9,592	0.0005	0.9995	99.78
8.5	20,211,245	9,487	0.0005	0.9995	99.73
9.5	19,802,709	6,524	0.0003	0.9997	99.68
10.5	19,482,577	6,745	0.0003	0.9997	99.65
11.5	19,448,786	5,682	0.0003	0.9997	99.62
12.5	19,596,413	4,228	0.0002	0.9998	99.59
13.5	19,751,917	6,317	0.0003	0.9997	99.57
14.5	19,934,651	5,618	0.0003	0.9997	99.53
15.5	17,205,148	7,009	0.0004	0.9996	99.51
16.5	17,277,627	5,352	0.0003	0.9997	99.47
17.5	16,710,064	8,815	0.0005	0.9995	99.44
18.5	14,837,521	7,304	0.0005	0.9995	99.38
19.5	13,092,166	5,352	0.0004	0.9996	99.33
20.5	11,669,843	4,211	0.0004	0.9996	99.29
21.5	10,981,256	4,646	0.0004	0.9996	99.26
22.5	10,376,369	5,651	0.0005	0.9995	99.22
23.5	9,646,568	7,117	0.0007	0.9993	99.16
24.5	8,349,210	6,714	0.0008	0.9992	99.09
25.5	7,444,832	5,503	0.0007	0.9993	99.01
26.5	6,493,795	5,933	0.0009	0.9991	98.94
27.5	5,872,196	5,316	0.0009	0.9991	98.85
28.5	5,313,699	6,429	0.0012	0.9988	98.76
29.5	4,897,393	6,772	0.0014	0.9986	98.64
30.5	4,498,789	6,816	0.0015	0.9985	98.50
31.5	4,140,913	6,457	0.0016	0.9984	98.35
32.5	3,894,157	8,938	0.0023	0.9977	98.20
33.5	3,588,453	6,406	0.0018	0.9982	97.97
34.5	3,319,404	5,471	0.0016	0.9984	97.80
35.5	3,078,334	6,015	0.0020	0.9980	97.64
36.5	2,840,856	6,076	0.0021	0.9979	97.45
37.5	2,693,987	5,605	0.0021	0.9979	97.24
38.5	2,558,135	7,136	0.0028	0.9972	97.03

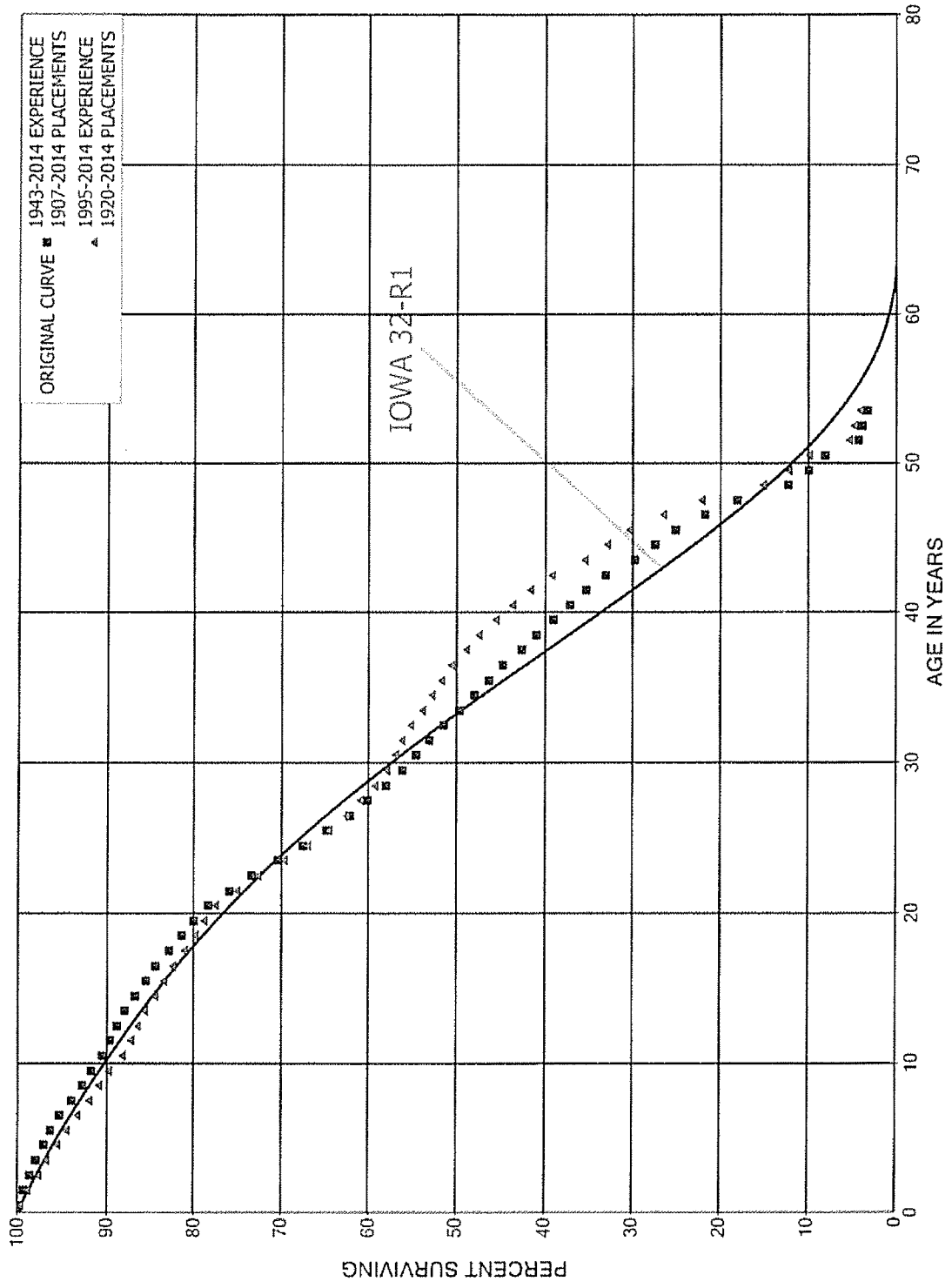
PENNSYLVANIA POWER COMPANY

ACCOUNT 369 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1923-2014			EXPERIENCE BAND 1995-2014			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
39.5	2,351,653	6,903	0.0029	0.9971	96.76	
40.5	2,076,903	6,122	0.0029	0.9971	96.48	
41.5	1,816,131	4,673	0.0026	0.9974	96.20	
42.5	1,622,203	5,370	0.0033	0.9967	95.95	
43.5	1,502,743	7,114	0.0047	0.9953	95.63	
44.5	1,418,573	6,134	0.0043	0.9957	95.18	
45.5	1,343,596	5,746	0.0043	0.9957	94.77	
46.5	1,259,066	5,507	0.0044	0.9956	94.36	
47.5	1,188,749	5,743	0.0048	0.9952	93.95	
48.5	1,114,818	5,685	0.0051	0.9949	93.49	
49.5	1,046,106	5,053	0.0048	0.9952	93.02	
50.5	981,843	4,410	0.0045	0.9955	92.57	
51.5	916,596	4,272	0.0047	0.9953	92.15	
52.5	803,731	4,438	0.0055	0.9945	91.72	
53.5	755,930	5,043	0.0067	0.9933	91.22	
54.5	706,888	4,453	0.0063	0.9937	90.61	
55.5	649,444	3,765	0.0058	0.9942	90.04	
56.5	591,505	4,216	0.0071	0.9929	89.51	
57.5	526,258	4,458	0.0085	0.9915	88.88	
58.5	457,024	4,085	0.0089	0.9911	88.12	
59.5	398,552	3,177	0.0080	0.9920	87.34	
60.5	347,555	2,260	0.0065	0.9935	86.64	
61.5	293,347	1,803	0.0061	0.9939	86.08	
62.5	243,661	1,895	0.0078	0.9922	85.55	
63.5	206,439	2,394	0.0116	0.9884	84.88	
64.5	171,702	3,364	0.0196	0.9804	83.90	
65.5	145,089	3,211	0.0221	0.9779	82.25	
66.5	126,695	4,010	0.0316	0.9684	80.43	
67.5	106,545	13,200	0.1239	0.8761	77.89	
68.5	92,763	18,218	0.1964	0.8036	68.24	
69.5	75,755	46,005	0.6073	0.3927	54.84	
70.5	30,778	4,756	0.1545	0.8455	21.53	
71.5	27,284	2,620	0.0960	0.9040	18.21	
72.5	25,841	10,105	0.3910	0.6090	16.46	
73.5	15,736	14,553	0.9248	0.0752	10.02	
74.5	1,183	1,183	1.0000		0.75	
75.5						

PENNSYLVANIA POWER COMPANY
ACCOUNT 370 METERS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA POWER COMPANY

ACCOUNT 370 METERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1907-2014

EXPERIENCE BAND 1943-2014

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	30,739,406	78,333	0.0025	0.9975	100.00
0.5	28,138,337	117,352	0.0042	0.9958	99.75
1.5	26,605,592	183,519	0.0069	0.9931	99.33
2.5	26,288,661	186,229	0.0071	0.9929	98.64
3.5	25,328,396	238,268	0.0094	0.9906	97.95
4.5	24,957,337	192,518	0.0077	0.9923	97.02
5.5	25,335,094	253,158	0.0100	0.9900	96.28
6.5	25,363,070	376,984	0.0149	0.9851	95.31
7.5	25,096,004	305,019	0.0122	0.9878	93.90
8.5	24,219,781	269,027	0.0111	0.9889	92.76
9.5	23,691,511	324,968	0.0137	0.9863	91.73
10.5	23,026,188	221,207	0.0096	0.9904	90.47
11.5	22,538,754	182,955	0.0081	0.9919	89.60
12.5	22,542,657	236,457	0.0105	0.9895	88.87
13.5	22,305,082	319,946	0.0143	0.9857	87.94
14.5	22,002,271	303,693	0.0138	0.9862	86.68
15.5	21,806,151	287,878	0.0132	0.9868	85.48
16.5	21,436,772	373,799	0.0174	0.9826	84.35
17.5	21,238,221	367,413	0.0173	0.9827	82.88
18.5	20,701,201	348,301	0.0168	0.9832	81.45
19.5	20,219,473	417,938	0.0207	0.9793	80.08
20.5	19,216,186	613,537	0.0319	0.9681	78.42
21.5	17,996,103	592,873	0.0329	0.9671	75.92
22.5	16,644,693	687,872	0.0413	0.9587	73.42
23.5	15,409,111	628,068	0.0408	0.9592	70.38
24.5	14,280,883	574,741	0.0402	0.9598	67.51
25.5	13,423,277	531,916	0.0396	0.9604	64.80
26.5	12,505,725	408,723	0.0327	0.9673	62.23
27.5	11,836,274	409,836	0.0346	0.9654	60.20
28.5	11,248,525	374,317	0.0333	0.9667	58.11
29.5	10,584,182	298,510	0.0282	0.9718	56.18
30.5	9,893,033	285,828	0.0289	0.9711	54.59
31.5	9,325,599	279,531	0.0300	0.9700	53.02
32.5	8,866,924	309,187	0.0349	0.9651	51.43
33.5	8,325,898	279,048	0.0335	0.9665	49.63
34.5	7,824,267	267,783	0.0342	0.9658	47.97
35.5	7,265,009	259,033	0.0357	0.9643	46.33
36.5	6,707,224	307,092	0.0458	0.9542	44.68
37.5	6,041,371	236,431	0.0391	0.9609	42.63
38.5	5,490,105	250,760	0.0457	0.9543	40.96

PENNSYLVANIA POWER COMPANY

ACCOUNT 370 METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1907-2014

EXPERIENCE BAND 1943-2014

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	4,942,880	238,939	0.0483	0.9517	39.09
40.5	4,413,882	227,474	0.0515	0.9485	37.20
41.5	3,837,986	242,185	0.0631	0.9369	35.28
42.5	3,244,345	330,359	0.1018	0.8982	33.06
43.5	2,424,197	187,099	0.0772	0.9228	29.69
44.5	2,016,641	171,900	0.0852	0.9148	27.40
45.5	1,654,208	222,302	0.1344	0.8656	25.06
46.5	1,195,376	200,239	0.1675	0.8325	21.70
47.5	829,198	265,150	0.3198	0.6802	18.06
48.5	334,567	63,479	0.1897	0.8103	12.29
49.5	191,829	36,965	0.1927	0.8073	9.96
50.5	127,997	59,684	0.4663	0.5337	8.04
51.5	66,009	7,192	0.1090	0.8910	4.29
52.5	56,243	7,105	0.1263	0.8737	3.82
53.5	50,300	2,707	0.0538	0.9462	3.34
54.5	47,864	4,188	0.0875	0.9125	3.16
55.5	41,888	2,638	0.0630	0.9370	2.88
56.5	23,378	1,636	0.0700	0.9300	2.70
57.5	21,034	1,573	0.0748	0.9252	2.51
58.5	18,796	1,541	0.0820	0.9180	2.32
59.5	18,267	1,191	0.0652	0.9348	2.13
60.5	17,729	985	0.0556	0.9444	1.99
61.5	18,871	613	0.0325	0.9675	1.88
62.5	18,070	1,220	0.0675	0.9325	1.82
63.5	15,543	450	0.0289	0.9711	1.70
64.5	14,075	1,496	0.1063	0.8937	1.65
65.5	12,579	1,554	0.1235	0.8765	1.48
66.5	10,857	204	0.0188	0.9812	1.29
67.5	10,218	239	0.0234	0.9766	1.27
68.5	9,979	1,027	0.1029	0.8971	1.24
69.5	8,932	856	0.0958	0.9042	1.11
70.5	8,076	2,998	0.3712	0.6288	1.01
71.5	5,078	2,077	0.4090	0.5910	0.63
72.5	1,555	787	0.5062	0.4938	0.37
73.5	816	369	0.4517	0.5483	0.18
74.5	447	70	0.1555	0.8445	0.10
75.5	355		0.0000	1.0000	0.09
76.5	349		0.0000	1.0000	0.09
77.5	349		0.0000	1.0000	0.09
78.5	349	28	0.0798	0.9202	0.09

PENNSYLVANIA POWER COMPANY

ACCOUNT 370 METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1907-2014			EXPERIENCE BAND 1943-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	321		0.0000	1.0000	0.08
80.5	297	24	0.0801	0.9199	0.08
81.5	273	62	0.2253	0.7747	0.07
82.5	212		0.0000	1.0000	0.06
83.5	88		0.0000	1.0000	0.06
84.5	88	29	0.3333	0.6667	0.06
85.5	59		0.0000	1.0000	0.04
86.5	59		0.0000	1.0000	0.04
87.5	59		0.0000	1.0000	0.04
88.5	59		0.0000	1.0000	0.04
89.5	59		0.0000	1.0000	0.04
90.5	59		0.0000	1.0000	0.04
91.5	59		0.0000	1.0000	0.04
92.5	59	29	0.5000	0.5000	0.04
93.5	29		0.0000	1.0000	0.02
94.5					0.02

PENNSYLVANIA POWER COMPANY

ACCOUNT 370 METERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1920-2014

EXPERIENCE BAND 1995-2014

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	13,607,703	74,684	0.0055	0.9945	100.00
0.5	11,831,415	83,382	0.0070	0.9930	99.45
1.5	10,734,778	130,165	0.0121	0.9879	98.75
2.5	10,973,648	103,849	0.0095	0.9905	97.55
3.5	10,474,232	136,173	0.0130	0.9870	96.63
4.5	10,767,661	114,116	0.0106	0.9894	95.37
5.5	11,512,331	141,952	0.0123	0.9877	94.36
6.5	11,992,141	174,085	0.0145	0.9855	93.20
7.5	12,035,730	147,243	0.0122	0.9878	91.85
8.5	11,778,098	144,889	0.0123	0.9877	90.72
9.5	11,689,536	195,162	0.0167	0.9833	89.61
10.5	11,712,805	133,042	0.0114	0.9886	88.11
11.5	11,617,124	104,047	0.0090	0.9910	87.11
12.5	11,850,812	120,574	0.0102	0.9898	86.33
13.5	11,976,795	165,635	0.0138	0.9862	85.45
14.5	12,038,421	145,509	0.0121	0.9879	84.27
15.5	12,184,329	134,603	0.0110	0.9890	83.25
16.5	12,337,442	203,957	0.0165	0.9835	82.33
17.5	12,525,113	184,324	0.0147	0.9853	80.97
18.5	12,608,644	162,486	0.0129	0.9871	79.78
19.5	12,664,181	222,671	0.0176	0.9824	78.75
20.5	12,283,073	390,670	0.0318	0.9682	77.37
21.5	11,798,420	380,004	0.0322	0.9678	74.91
22.5	11,194,805	468,012	0.0418	0.9582	72.49
23.5	10,980,934	409,102	0.0373	0.9627	69.46
24.5	10,421,670	380,885	0.0365	0.9635	66.87
25.5	10,061,823	319,997	0.0318	0.9682	64.43
26.5	9,781,435	247,400	0.0253	0.9747	62.38
27.5	9,530,523	253,412	0.0266	0.9734	60.80
28.5	9,527,987	217,417	0.0228	0.9772	59.19
29.5	9,327,995	160,248	0.0172	0.9828	57.84
30.5	8,760,697	126,458	0.0144	0.9856	56.84
31.5	8,372,563	151,032	0.0180	0.9820	56.02
32.5	8,128,720	190,661	0.0235	0.9765	55.01
33.5	7,705,565	156,150	0.0203	0.9797	53.72
34.5	7,352,443	156,258	0.0213	0.9787	52.63
35.5	6,897,428	147,210	0.0213	0.9787	51.51
36.5	6,460,440	216,314	0.0335	0.9665	50.41
37.5	5,873,873	179,702	0.0306	0.9694	48.73
38.5	5,377,286	204,684	0.0381	0.9619	47.24

PENNSYLVANIA POWER COMPANY

ACCOUNT 370 METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1920-2014			EXPERIENCE BAND 1995-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	4,856,173	201,665	0.0415	0.9585	45.44
40.5	4,346,033	203,277	0.0468	0.9532	43.55
41.5	3,778,149	222,941	0.0590	0.9410	41.51
42.5	3,201,590	309,136	0.0966	0.9034	39.06
43.5	2,391,679	172,362	0.0721	0.9279	35.29
44.5	1,993,706	159,602	0.0801	0.9199	32.75
45.5	1,634,852	210,358	0.1287	0.8713	30.13
46.5	1,181,575	194,391	0.1645	0.8355	26.25
47.5	823,752	262,965	0.3192	0.6808	21.93
48.5	331,903	62,754	0.1891	0.8109	14.93
49.5	190,686	36,909	0.1936	0.8064	12.11
50.5	126,974	59,663	0.4699	0.5301	9.76
51.5	62,300	7,086	0.1137	0.8863	5.18
52.5	54,989	7,095	0.1290	0.8710	4.59
53.5	47,940	2,693	0.0562	0.9438	4.00
54.5	46,943	4,176	0.0890	0.9110	3.77
55.5	41,098	2,544	0.0619	0.9381	3.44
56.5	22,599	1,627	0.0720	0.9280	3.22
57.5	20,493	1,443	0.0704	0.9296	2.99
58.5	18,359	1,527	0.0832	0.9168	2.78
59.5	15,940	1,173	0.0736	0.9264	2.55
60.5	15,888	979	0.0616	0.9384	2.36
61.5	15,717	609	0.0387	0.9613	2.22
62.5	17,198	1,219	0.0709	0.9291	2.13
63.5	14,932	445	0.0298	0.9702	1.98
64.5	13,734	1,496	0.1089	0.8911	1.92
65.5	12,521	1,552	0.1239	0.8761	1.71
66.5	10,801	203	0.0188	0.9812	1.50
67.5	10,163	196	0.0193	0.9807	1.47
68.5	9,967	1,023	0.1026	0.8974	1.44
69.5	8,924	856	0.0959	0.9041	1.29
70.5	8,068	2,995	0.3712	0.6288	1.17
71.5	5,073	2,075	0.4090	0.5910	0.74
72.5	1,552	786	0.5065	0.4935	0.43
73.5	726	367	0.5052	0.4948	0.21
74.5	447	70	0.1555	0.8445	0.11
75.5	355		0.0000	1.0000	0.09
76.5	349		0.0000	1.0000	0.09
77.5	349		0.0000	1.0000	0.09
78.5	349	28	0.0798	0.9202	0.09

PENNSYLVANIA POWER COMPANY

ACCOUNT 370 METERS

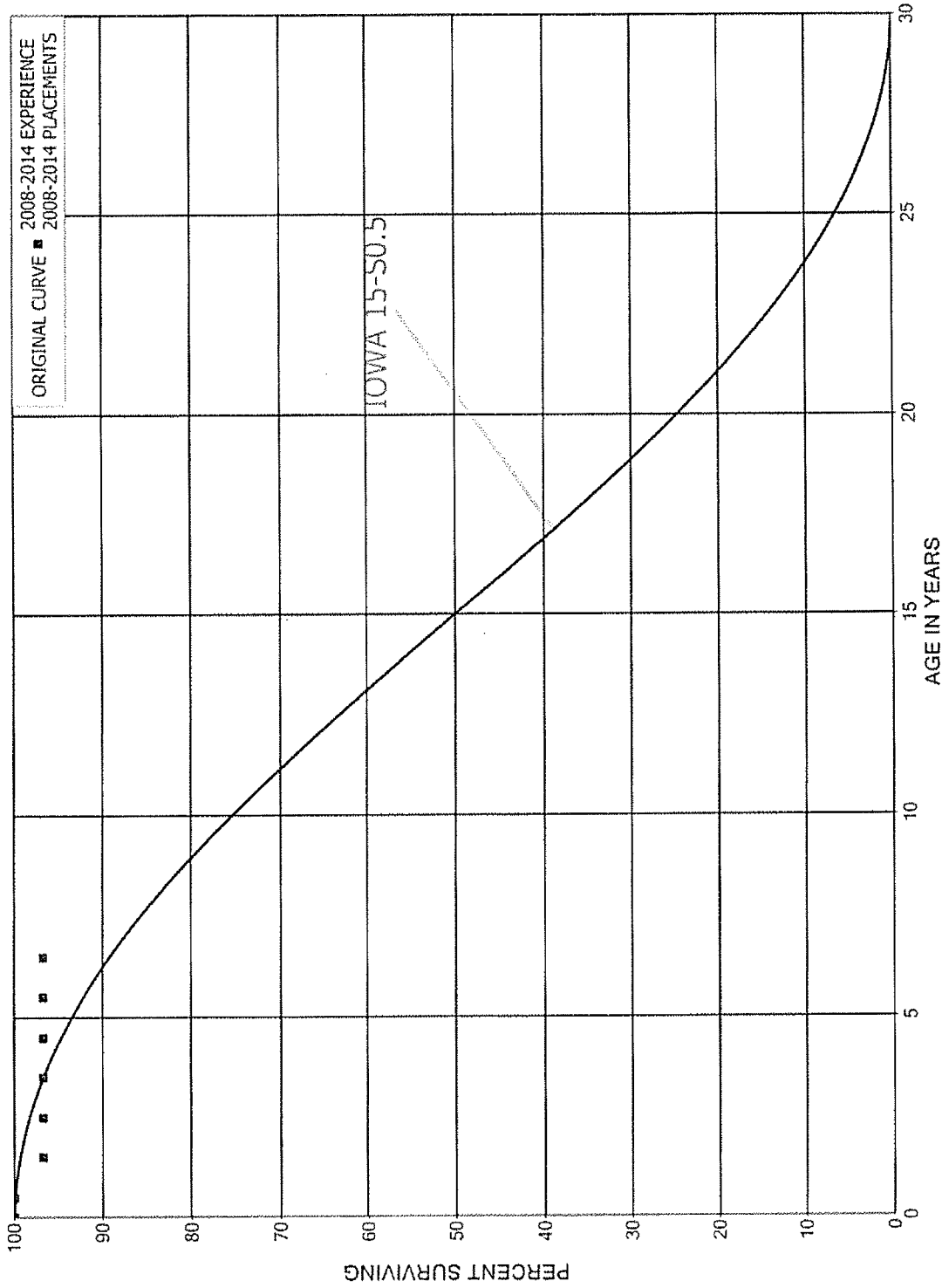
ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1920-2014

EXPERIENCE BAND 1995-2014

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	321		0.0000	1.0000	0.08
80.5	297	24	0.0801	0.9199	0.08
81.5	273	62	0.2253	0.7747	0.08
82.5	212		0.0000	1.0000	0.06
83.5	88		0.0000	1.0000	0.06
84.5	88	29	0.3333	0.6667	0.06
85.5	59		0.0000	1.0000	0.04
86.5	59		0.0000	1.0000	0.04
87.5	59		0.0000	1.0000	0.04
88.5	59		0.0000	1.0000	0.04
89.5	59		0.0000	1.0000	0.04
90.5	59		0.0000	1.0000	0.04
91.5	59		0.0000	1.0000	0.04
92.5	59	29	0.5000	0.5000	0.04
93.5	29		0.0000	1.0000	0.02
94.5					0.02

PENNSYLVANIA POWER COMPANY
ACCOUNT 370.1 METERS - SMART GRID
ORIGINAL AND SMOOTH SURVIVOR CURVES



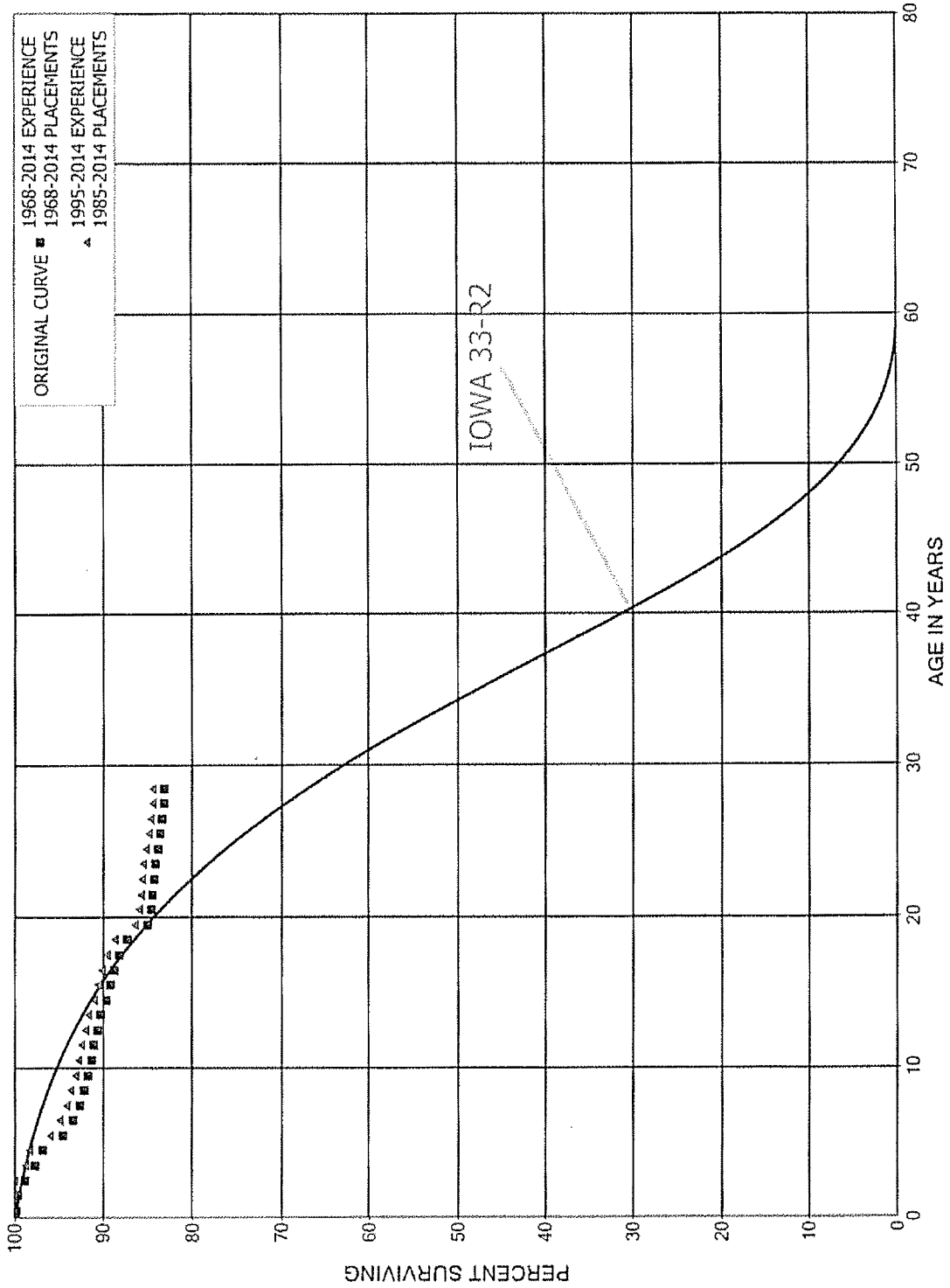
PENNSYLVANIA POWER COMPANY

ACCOUNT 370.1 METERS - SMART GRID

ORIGINAL LIFE TABLE

PLACEMENT BAND 2008-2014			EXPERIENCE BAND 2008-2014			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
0.0	6,387,266	4,921	0.0008	0.9992	100.00	
0.5	167,479	5,401	0.0322	0.9678	99.92	
1.5	45,565		0.0000	1.0000	96.70	
2.5	45,565		0.0000	1.0000	96.70	
3.5	45,565		0.0000	1.0000	96.70	
4.5	15		0.0000	1.0000	96.70	
5.5	15		0.0000	1.0000	96.70	
6.5					96.70	

PENNSYLVANIA POWER COMPANY
ACCOUNT 371 INSTALLATIONS ON CUSTOMERS' PREMISES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA POWER COMPANY

ACCOUNT 371 INSTALLATIONS ON CUSTOMERS' PREMISES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1968-2014

EXPERIENCE BAND 1968-2014

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	4,491,369	6,445	0.0014	0.9986	100.00
0.5	4,433,520	11,446	0.0026	0.9974	99.86
1.5	4,607,959	35,570	0.0077	0.9923	99.60
2.5	4,106,278	47,532	0.0116	0.9884	98.83
3.5	3,967,558	33,741	0.0085	0.9915	97.69
4.5	3,611,607	89,412	0.0248	0.9752	96.86
5.5	3,701,495	41,357	0.0112	0.9888	94.46
6.5	3,654,181	30,954	0.0085	0.9915	93.40
7.5	3,575,839	16,098	0.0045	0.9955	92.61
8.5	3,440,663	18,447	0.0054	0.9946	92.19
9.5	3,339,996	14,880	0.0045	0.9955	91.70
10.5	3,250,966	9,271	0.0029	0.9971	91.29
11.5	3,194,403	15,027	0.0047	0.9953	91.03
12.5	3,155,214	10,076	0.0032	0.9968	90.60
13.5	2,976,568	21,324	0.0072	0.9928	90.31
14.5	2,914,191	17,439	0.0060	0.9940	89.67
15.5	2,863,302	14,706	0.0051	0.9949	89.13
16.5	2,784,108	17,109	0.0061	0.9939	88.67
17.5	2,708,844	27,016	0.0100	0.9900	88.13
18.5	2,585,927	64,182	0.0248	0.9752	87.25
19.5	2,480,131	13,195	0.0053	0.9947	85.08
20.5	2,410,621	3,873	0.0016	0.9984	84.63
21.5	2,100,184	4,307	0.0021	0.9979	84.49
22.5	1,778,842	2,606	0.0015	0.9985	84.32
23.5	1,355,307	5,332	0.0039	0.9961	84.20
24.5	978,336	3,530	0.0036	0.9964	83.87
25.5	720,631	1,910	0.0026	0.9974	83.56
26.5	523,934	1,008	0.0019	0.9981	83.34
27.5	179,978		0.0000	1.0000	83.18
28.5	46,399		0.0000	1.0000	83.18
29.5					83.18

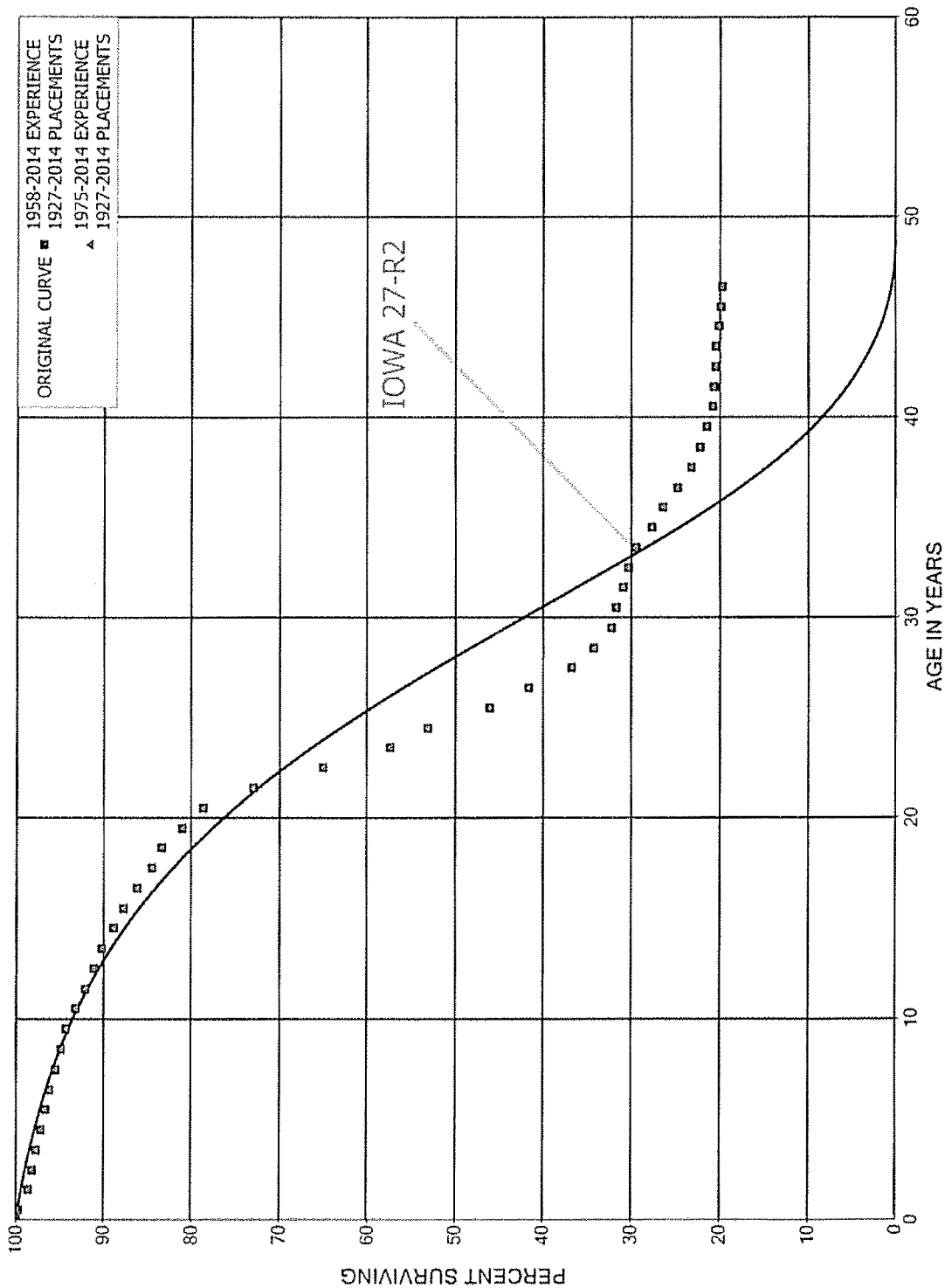
PENNSYLVANIA POWER COMPANY

ACCOUNT 371 INSTALLATIONS ON CUSTOMERS' PREMISES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1985-2014			EXPERIENCE BAND 1995-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	1,444,622		0.0000	1.0000	100.00
0.5	1,626,562	1,775	0.0011	0.9989	100.00
1.5	1,826,180	1,381	0.0008	0.9992	99.89
2.5	2,066,056	24,351	0.0118	0.9882	99.82
3.5	2,452,273	12,608	0.0051	0.9949	98.64
4.5	2,514,182	59,749	0.0238	0.9762	98.13
5.5	2,771,793	30,161	0.0109	0.9891	95.80
6.5	2,956,430	23,483	0.0079	0.9921	94.76
7.5	3,240,027	16,098	0.0050	0.9950	94.00
8.5	3,241,157	18,447	0.0057	0.9943	93.54
9.5	3,186,889	14,880	0.0047	0.9953	93.01
10.5	3,097,859	9,271	0.0030	0.9970	92.57
11.5	3,041,296	15,027	0.0049	0.9951	92.29
12.5	3,002,107	9,706	0.0032	0.9968	91.84
13.5	2,973,263	21,324	0.0072	0.9928	91.54
14.5	2,910,887	16,662	0.0057	0.9943	90.88
15.5	2,860,775	14,706	0.0051	0.9949	90.36
16.5	2,781,581	17,109	0.0062	0.9938	89.90
17.5	2,706,317	27,016	0.0100	0.9900	89.35
18.5	2,583,400	64,182	0.0248	0.9752	88.45
19.5	2,477,604	13,195	0.0053	0.9947	86.26
20.5	2,408,095	3,873	0.0016	0.9984	85.80
21.5	2,097,658	4,307	0.0021	0.9979	85.66
22.5	1,776,315	2,606	0.0015	0.9985	85.48
23.5	1,352,780	5,332	0.0039	0.9961	85.36
24.5	975,810	3,530	0.0036	0.9964	85.02
25.5	720,631	1,910	0.0026	0.9974	84.71
26.5	523,934	1,008	0.0019	0.9981	84.49
27.5	179,978		0.0000	1.0000	84.33
28.5	46,399		0.0000	1.0000	84.33
29.5					84.33

PENNSYLVANIA POWER COMPANY
 ACCOUNTS 373.1 AND 373.2 STREET LIGHTING AND SIGNAL SYSTEMS
 ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA POWER COMPANY

ACCOUNTS 373.1 AND 373.2 STREET LIGHTING AND SIGNAL SYSTEMS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1927-2014			EXPERIENCE BAND 1958-2014			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
0.0	10,496,427	25,959	0.0025	0.9975	100.00	
0.5	10,133,446	119,200	0.0118	0.9882	99.75	
1.5	10,286,599	45,200	0.0044	0.9956	98.58	
2.5	9,763,728	45,243	0.0046	0.9954	98.15	
3.5	9,189,585	47,002	0.0051	0.9949	97.69	
4.5	8,096,463	45,889	0.0057	0.9943	97.19	
5.5	8,229,983	41,061	0.0050	0.9950	96.64	
6.5	8,409,281	60,664	0.0072	0.9928	96.16	
7.5	8,174,436	55,025	0.0067	0.9933	95.46	
8.5	7,851,504	45,198	0.0058	0.9942	94.82	
9.5	7,511,254	88,711	0.0118	0.9882	94.28	
10.5	7,196,232	85,546	0.0119	0.9881	93.16	
11.5	6,804,320	69,956	0.0103	0.9897	92.06	
12.5	6,645,080	67,240	0.0101	0.9899	91.11	
13.5	6,412,095	97,969	0.0153	0.9847	90.19	
14.5	6,262,726	76,421	0.0122	0.9878	88.81	
15.5	6,130,429	110,315	0.0180	0.9820	87.73	
16.5	5,914,281	113,105	0.0191	0.9809	86.15	
17.5	5,681,164	75,820	0.0133	0.9867	84.50	
18.5	5,425,643	152,538	0.0281	0.9719	83.37	
19.5	5,061,637	146,760	0.0290	0.9710	81.03	
20.5	4,616,991	333,384	0.0722	0.9278	78.68	
21.5	3,890,913	425,347	0.1093	0.8907	73.00	
22.5	3,085,308	363,869	0.1179	0.8821	65.02	
23.5	2,313,157	172,199	0.0744	0.9256	57.35	
24.5	1,853,269	245,240	0.1323	0.8677	53.08	
25.5	1,274,437	122,071	0.0958	0.9042	46.06	
26.5	1,167,275	139,042	0.1191	0.8809	41.64	
27.5	1,016,036	70,644	0.0695	0.9305	36.68	
28.5	909,552	52,941	0.0582	0.9418	34.13	
29.5	753,653	13,163	0.0175	0.9825	32.15	
30.5	697,802	16,156	0.0232	0.9768	31.59	
31.5	674,455	11,587	0.0172	0.9828	30.85	
32.5	620,467	17,913	0.0289	0.9711	30.32	
33.5	598,244	37,573	0.0628	0.9372	29.45	
34.5	520,472	23,568	0.0453	0.9547	27.60	
35.5	434,216	25,937	0.0597	0.9403	26.35	
36.5	400,455	25,482	0.0636	0.9364	24.78	
37.5	360,744	15,333	0.0425	0.9575	23.20	
38.5	334,679	12,102	0.0362	0.9638	22.21	

PENNSYLVANIA POWER COMPANY

ACCOUNTS 373.1 AND 373.2 STREET LIGHTING AND SIGNAL SYSTEMS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1927-2014

EXPERIENCE BAND 1958-2014

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	269,235	8,170	0.0303	0.9697	21.41
40.5	225,412	1,349	0.0060	0.9940	20.76
41.5	218,714	2,065	0.0094	0.9906	20.64
42.5	207,730	599	0.0029	0.9971	20.44
43.5	188,151	2,617	0.0139	0.9861	20.38
44.5	123,735	1,706	0.0138	0.9862	20.10
45.5	120,868	311	0.0026	0.9974	19.82
46.5	117,649	761	0.0065	0.9935	19.77
47.5	75,360	451	0.0060	0.9940	19.64
48.5	53,147	348	0.0065	0.9935	19.52
49.5	31,899	263	0.0082	0.9918	19.40
50.5	23,298	96	0.0041	0.9959	19.24
51.5	17,673	77	0.0044	0.9956	19.16
52.5	13,033	47	0.0036	0.9964	19.07
53.5	11,697	6	0.0005	0.9995	19.01
54.5	11,676		0.0000	1.0000	19.00
55.5	11,652		0.0000	1.0000	19.00
56.5	12,420		0.0000	1.0000	19.00
57.5	12,420		0.0000	1.0000	19.00
58.5	12,547		0.0000	1.0000	19.00
59.5	11,422		0.0000	1.0000	19.00
60.5	7,098		0.0000	1.0000	19.00
61.5	6,313		0.0000	1.0000	19.00
62.5	7,360		0.0000	1.0000	19.00
63.5	9,318		0.0000	1.0000	19.00
64.5	9,914		0.0000	1.0000	19.00
65.5	13,181		0.0000	1.0000	19.00
66.5	11,872		0.0000	1.0000	19.00
67.5	11,872		0.0000	1.0000	19.00
68.5	11,872		0.0000	1.0000	19.00
69.5	11,872		0.0000	1.0000	19.00
70.5	11,872		0.0000	1.0000	19.00
71.5	11,872		0.0000	1.0000	19.00
72.5	11,872		0.0000	1.0000	19.00
73.5	11,872		0.0000	1.0000	19.00
74.5	11,044		0.0000	1.0000	19.00
75.5	10,695		0.0000	1.0000	19.00
76.5	10,695		0.0000	1.0000	19.00
77.5	8,968		0.0000	1.0000	19.00
78.5	8,968		0.0000	1.0000	19.00

PENNSYLVANIA POWER COMPANY

ACCOUNTS 373.1 AND 373.2 STREET LIGHTING AND SIGNAL SYSTEMS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1927-2014			EXPERIENCE BAND 1958-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	8,841		0.0000	1.0000	19.00
80.5	8,841		0.0000	1.0000	19.00
81.5	8,841		0.0000	1.0000	19.00
82.5	8,841		0.0000	1.0000	19.00
83.5	7,794		0.0000	1.0000	19.00
84.5	5,836		0.0000	1.0000	19.00
85.5	5,239		0.0000	1.0000	19.00
86.5	1,973		0.0000	1.0000	19.00
87.5					19.00

PENNSYLVANIA POWER COMPANY

ACCOUNTS 373.1 AND 373.2 STREET LIGHTING AND SIGNAL SYSTEMS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1927-2014

EXPERIENCE BAND 1975-2014

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	8,990,940	25,959	0.0029	0.9971	100.00
0.5	8,815,701	108,986	0.0124	0.9876	99.71
1.5	9,066,594	40,491	0.0045	0.9955	98.48
2.5	8,652,491	39,771	0.0046	0.9954	98.04
3.5	8,278,196	39,835	0.0048	0.9952	97.59
4.5	7,481,900	41,520	0.0055	0.9945	97.12
5.5	7,863,511	39,921	0.0051	0.9949	96.58
6.5	8,404,967	60,664	0.0072	0.9928	96.09
7.5	8,170,122	55,025	0.0067	0.9933	95.40
8.5	7,847,191	45,198	0.0058	0.9942	94.75
9.5	7,506,940	88,711	0.0118	0.9882	94.21
10.5	7,191,918	85,546	0.0119	0.9881	93.09
11.5	6,800,007	69,956	0.0103	0.9897	91.99
12.5	6,640,766	67,240	0.0101	0.9899	91.04
13.5	6,407,781	97,969	0.0153	0.9847	90.12
14.5	6,258,412	76,421	0.0122	0.9878	88.74
15.5	6,126,116	110,315	0.0180	0.9820	87.66
16.5	5,914,281	113,105	0.0191	0.9809	86.08
17.5	5,681,164	75,820	0.0133	0.9867	84.43
18.5	5,425,643	152,538	0.0281	0.9719	83.31
19.5	5,061,637	146,760	0.0290	0.9710	80.96
20.5	4,616,991	333,384	0.0722	0.9278	78.62
21.5	3,890,913	425,347	0.1093	0.8907	72.94
22.5	3,085,308	363,869	0.1179	0.8821	64.97
23.5	2,313,157	172,199	0.0744	0.9256	57.30
24.5	1,853,269	245,240	0.1323	0.8677	53.04
25.5	1,274,437	122,071	0.0958	0.9042	46.02
26.5	1,167,275	139,042	0.1191	0.8809	41.61
27.5	1,016,036	70,644	0.0695	0.9305	36.66
28.5	909,552	52,941	0.0582	0.9418	34.11
29.5	753,653	13,163	0.0175	0.9825	32.12
30.5	697,802	16,156	0.0232	0.9768	31.56
31.5	674,455	11,587	0.0172	0.9828	30.83
32.5	620,467	17,913	0.0289	0.9711	30.30
33.5	598,244	37,573	0.0628	0.9372	29.43
34.5	520,472	23,568	0.0453	0.9547	27.58
35.5	434,216	25,937	0.0597	0.9403	26.33
36.5	400,455	25,482	0.0636	0.9364	24.76
37.5	360,744	15,333	0.0425	0.9575	23.18
38.5	334,679	12,102	0.0362	0.9638	22.20

PENNSYLVANIA POWER COMPANY

ACCOUNTS 373.1 AND 373.2 STREET LIGHTING AND SIGNAL SYSTEMS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1927-2014			EXPERIENCE BAND 1975-2014			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
39.5	269,235	8,170	0.0303	0.9697	21.39	
40.5	225,412	1,349	0.0060	0.9940	20.74	
41.5	218,714	2,065	0.0094	0.9906	20.62	
42.5	207,730	599	0.0029	0.9971	20.42	
43.5	188,151	2,617	0.0139	0.9861	20.37	
44.5	123,735	1,706	0.0138	0.9862	20.08	
45.5	120,868	311	0.0026	0.9974	19.81	
46.5	117,649	761	0.0065	0.9935	19.75	
47.5	75,360	451	0.0060	0.9940	19.63	
48.5	53,147	348	0.0065	0.9935	19.51	
49.5	31,899	263	0.0082	0.9918	19.38	
50.5	23,298	96	0.0041	0.9959	19.22	
51.5	17,673	77	0.0044	0.9956	19.14	
52.5	13,033	47	0.0036	0.9964	19.06	
53.5	11,697	6	0.0005	0.9995	18.99	
54.5	11,676		0.0000	1.0000	18.98	
55.5	11,652		0.0000	1.0000	18.98	
56.5	12,420		0.0000	1.0000	18.98	
57.5	12,420		0.0000	1.0000	18.98	
58.5	12,547		0.0000	1.0000	18.98	
59.5	11,422		0.0000	1.0000	18.98	
60.5	7,098		0.0000	1.0000	18.98	
61.5	6,313		0.0000	1.0000	18.98	
62.5	7,360		0.0000	1.0000	18.98	
63.5	9,318		0.0000	1.0000	18.98	
64.5	9,914		0.0000	1.0000	18.98	
65.5	13,181		0.0000	1.0000	18.98	
66.5	11,872		0.0000	1.0000	18.98	
67.5	11,872		0.0000	1.0000	18.98	
68.5	11,872		0.0000	1.0000	18.98	
69.5	11,872		0.0000	1.0000	18.98	
70.5	11,872		0.0000	1.0000	18.98	
71.5	11,872		0.0000	1.0000	18.98	
72.5	11,872		0.0000	1.0000	18.98	
73.5	11,872		0.0000	1.0000	18.98	
74.5	11,044		0.0000	1.0000	18.98	
75.5	10,695		0.0000	1.0000	18.98	
76.5	10,695		0.0000	1.0000	18.98	
77.5	8,968		0.0000	1.0000	18.98	
78.5	8,968		0.0000	1.0000	18.98	

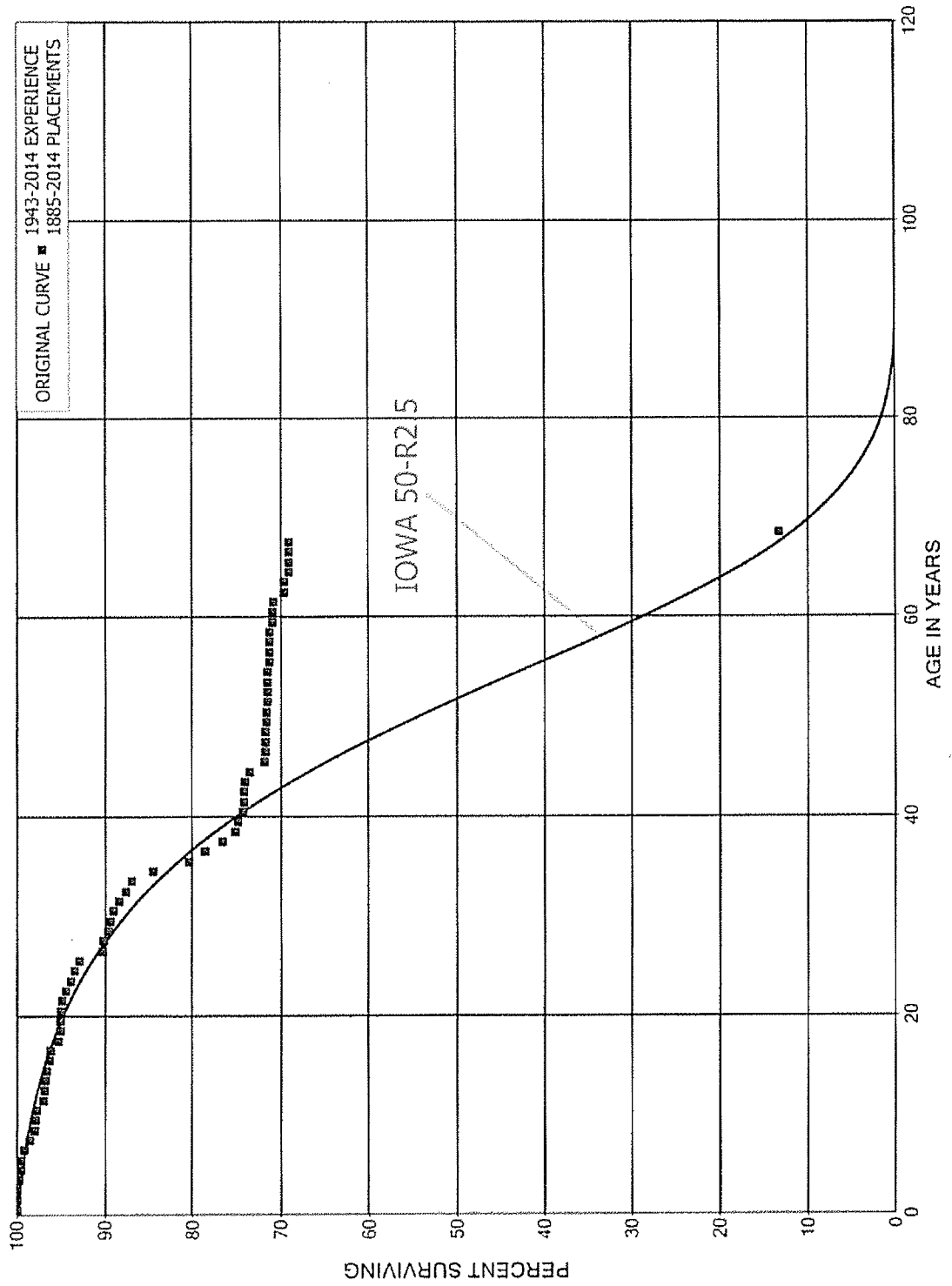
PENNSYLVANIA POWER COMPANY

ACCOUNTS 373.1 AND 373.2 STREET LIGHTING AND SIGNAL SYSTEMS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1927-2014			EXPERIENCE BAND 1975-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	8,841		0.0000	1.0000	18.98
80.5	8,841		0.0000	1.0000	18.98
81.5	8,841		0.0000	1.0000	18.98
82.5	8,841		0.0000	1.0000	18.98
83.5	7,794		0.0000	1.0000	18.98
84.5	5,836		0.0000	1.0000	18.98
85.5	5,239		0.0000	1.0000	18.98
86.5	1,973		0.0000	1.0000	18.98
87.5					18.98

PENNSYLVANIA POWER COMPANY
ACCOUNT 390 STRUCTURES AND IMPROVEMENTS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA POWER COMPANY

ACCOUNT 390 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1885-2014

EXPERIENCE BAND 1943-2014

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	7,020,409	217	0.0000	1.0000	100.00
0.5	7,172,083	989	0.0001	0.9999	100.00
1.5	6,930,294	217	0.0000	1.0000	99.98
2.5	7,091,530	18,493	0.0026	0.9974	99.98
3.5	7,022,174	12,388	0.0018	0.9982	99.72
4.5	6,899,039	3,654	0.0005	0.9995	99.54
5.5	6,769,484	25,014	0.0037	0.9963	99.49
6.5	6,494,245	43,753	0.0067	0.9933	99.12
7.5	6,450,656	31,194	0.0048	0.9952	98.46
8.5	6,276,487	6,634	0.0011	0.9989	97.98
9.5	5,989,918	8,546	0.0014	0.9986	97.88
10.5	5,984,341	47,497	0.0079	0.9921	97.74
11.5	4,693,490	7,619	0.0016	0.9984	96.96
12.5	4,672,586	2,838	0.0006	0.9994	96.80
13.5	4,660,253	4,380	0.0009	0.9991	96.74
14.5	4,797,321	16,484	0.0034	0.9966	96.65
15.5	4,780,083	6,210	0.0013	0.9987	96.32
16.5	4,559,214	43,246	0.0095	0.9905	96.20
17.5	4,476,027	8,076	0.0018	0.9982	95.28
18.5	4,484,765	2,250	0.0005	0.9995	95.11
19.5	4,157,585	5,122	0.0012	0.9988	95.06
20.5	4,095,135	6,705	0.0016	0.9984	94.95
21.5	3,675,055	16,265	0.0044	0.9956	94.79
22.5	2,929,960	16,712	0.0057	0.9943	94.37
23.5	2,836,899	12,139	0.0043	0.9957	93.83
24.5	2,793,230	19,220	0.0069	0.9931	93.43
25.5	2,822,209	77,705	0.0275	0.9725	92.79
26.5	2,747,219	1,281	0.0005	0.9995	90.23
27.5	2,711,583	17,781	0.0066	0.9934	90.19
28.5	2,687,251	6,415	0.0024	0.9976	89.60
29.5	2,632,260	8,995	0.0034	0.9966	89.39
30.5	2,574,360	21,398	0.0083	0.9917	89.08
31.5	2,552,609	20,393	0.0080	0.9920	88.34
32.5	2,487,687	20,131	0.0081	0.9919	87.64
33.5	2,459,972	68,365	0.0278	0.9722	86.93
34.5	1,895,450	93,510	0.0493	0.9507	84.51
35.5	1,780,572	37,984	0.0213	0.9787	80.34
36.5	1,723,887	44,570	0.0259	0.9741	78.63
37.5	1,668,645	31,495	0.0189	0.9811	76.59
38.5	1,625,860	7,096	0.0044	0.9956	75.15

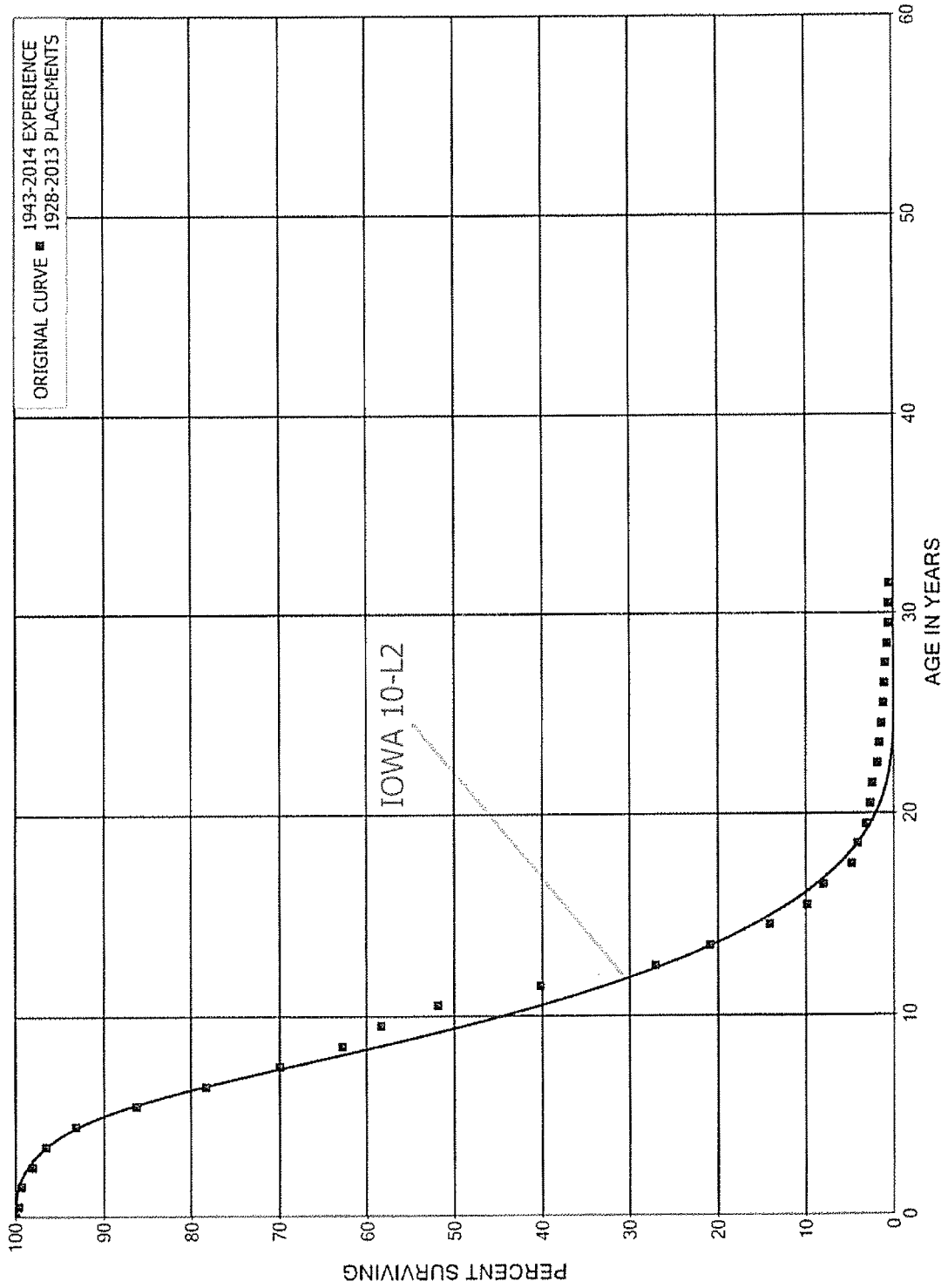
PENNSYLVANIA POWER COMPANY

ACCOUNT 390 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1885-2014			EXPERIENCE BAND 1943-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,600,147	11,786	0.0074	0.9926	74.82
40.5	1,568,895	1,064	0.0007	0.9993	74.27
41.5	1,545,614	350	0.0002	0.9998	74.22
42.5	1,528,794	3,089	0.0020	0.9980	74.20
43.5	1,518,507	12,227	0.0081	0.9919	74.05
44.5	1,503,615	33,848	0.0225	0.9775	73.46
45.5	1,324,012	1,470	0.0011	0.9989	71.80
46.5	1,317,639		0.0000	1.0000	71.72
47.5	1,309,806	700	0.0005	0.9995	71.72
48.5	1,287,602	403	0.0003	0.9997	71.68
49.5	1,272,937		0.0000	1.0000	71.66
50.5	1,248,619	2,455	0.0020	0.9980	71.66
51.5	1,218,164	735	0.0006	0.9994	71.52
52.5	1,204,595		0.0000	1.0000	71.48
53.5	1,203,798		0.0000	1.0000	71.48
54.5	542,459	1,836	0.0034	0.9966	71.48
55.5	539,987		0.0000	1.0000	71.24
56.5	535,791		0.0000	1.0000	71.24
57.5	535,721		0.0000	1.0000	71.24
58.5	332,996	1,104	0.0033	0.9967	71.24
59.5	331,892	51	0.0002	0.9998	71.00
60.5	331,478	565	0.0017	0.9983	70.99
61.5	326,417	5,795	0.0178	0.9822	70.87
62.5	313,362		0.0000	1.0000	69.61
63.5	12,440	103	0.0083	0.9917	69.61
64.5	11,788		0.0000	1.0000	69.03
65.5	11,218		0.0000	1.0000	69.03
66.5	11,218		0.0000	1.0000	69.03
67.5	11,218	9,054	0.8071	0.1929	69.03
68.5	2,164		0.0000	1.0000	13.32
69.5	2,164	1,430	0.6608	0.3392	13.32
70.5	734	681	0.9276	0.0724	4.52
71.5	53		0.0000	1.0000	0.33
72.5	53		0.0000	1.0000	0.33
73.5	53	0	0.0032	0.9968	0.33
74.5	53	53	1.0000		0.33
75.5					

PENNSYLVANIA POWER COMPANY
ACCOUNT 392 TRANSPORTATION EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA POWER COMPANY

ACCOUNT 392 TRANSPORTATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1928-2013			EXPERIENCE BAND 1943-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	12,303,855	40,764	0.0033	0.9967	100.00
0.5	11,846,603	41,513	0.0035	0.9965	99.67
1.5	10,839,136	135,058	0.0125	0.9875	99.32
2.5	7,404,261	120,869	0.0163	0.9837	98.08
3.5	6,640,433	227,146	0.0342	0.9658	96.48
4.5	6,086,100	452,241	0.0743	0.9257	93.18
5.5	5,594,998	507,112	0.0906	0.9094	86.26
6.5	5,091,698	547,568	0.1075	0.8925	78.44
7.5	4,544,415	463,989	0.1021	0.8979	70.00
8.5	4,081,172	291,828	0.0715	0.9285	62.86
9.5	3,779,477	422,421	0.1118	0.8882	58.36
10.5	3,427,094	768,144	0.2241	0.7759	51.84
11.5	3,285,689	1,073,849	0.3268	0.6732	40.22
12.5	2,483,569	575,247	0.2316	0.7684	27.07
13.5	1,899,348	619,016	0.3259	0.6741	20.80
14.5	1,566,936	469,226	0.2995	0.7005	14.02
15.5	1,155,921	225,006	0.1947	0.8053	9.82
16.5	907,327	366,811	0.4043	0.5957	7.91
17.5	545,447	78,242	0.1434	0.8566	4.71
18.5	494,622	120,044	0.2427	0.7573	4.04
19.5	374,578	52,242	0.1395	0.8605	3.06
20.5	317,314	31,007	0.0977	0.9023	2.63
21.5	318,572	67,604	0.2122	0.7878	2.37
22.5	257,703	40,207	0.1560	0.8440	1.87
23.5	217,468	27,861	0.1281	0.8719	1.58
24.5	235,933	37,409	0.1586	0.8414	1.38
25.5	203,139	14,681	0.0723	0.9277	1.16
26.5	200,857	30,166	0.1502	0.8498	1.07
27.5	187,997	29,015	0.1543	0.8457	0.91
28.5	158,982	21,208	0.1334	0.8666	0.77
29.5	158,035	16,847	0.1066	0.8934	0.67
30.5	145,065	10,835	0.0747	0.9253	0.60
31.5	128,058	16,155	0.1262	0.8738	0.55
32.5	115,680	6,620	0.0572	0.9428	0.48
33.5	115,583	7,357	0.0637	0.9363	0.46
34.5	103,134	5,461	0.0530	0.9470	0.43
35.5	82,038	7,128	0.0869	0.9131	0.40
36.5	76,608	15,262	0.1992	0.8008	0.37
37.5	56,479	7,789	0.1379	0.8621	0.30
38.5	48,690	4,335	0.0890	0.9110	0.25

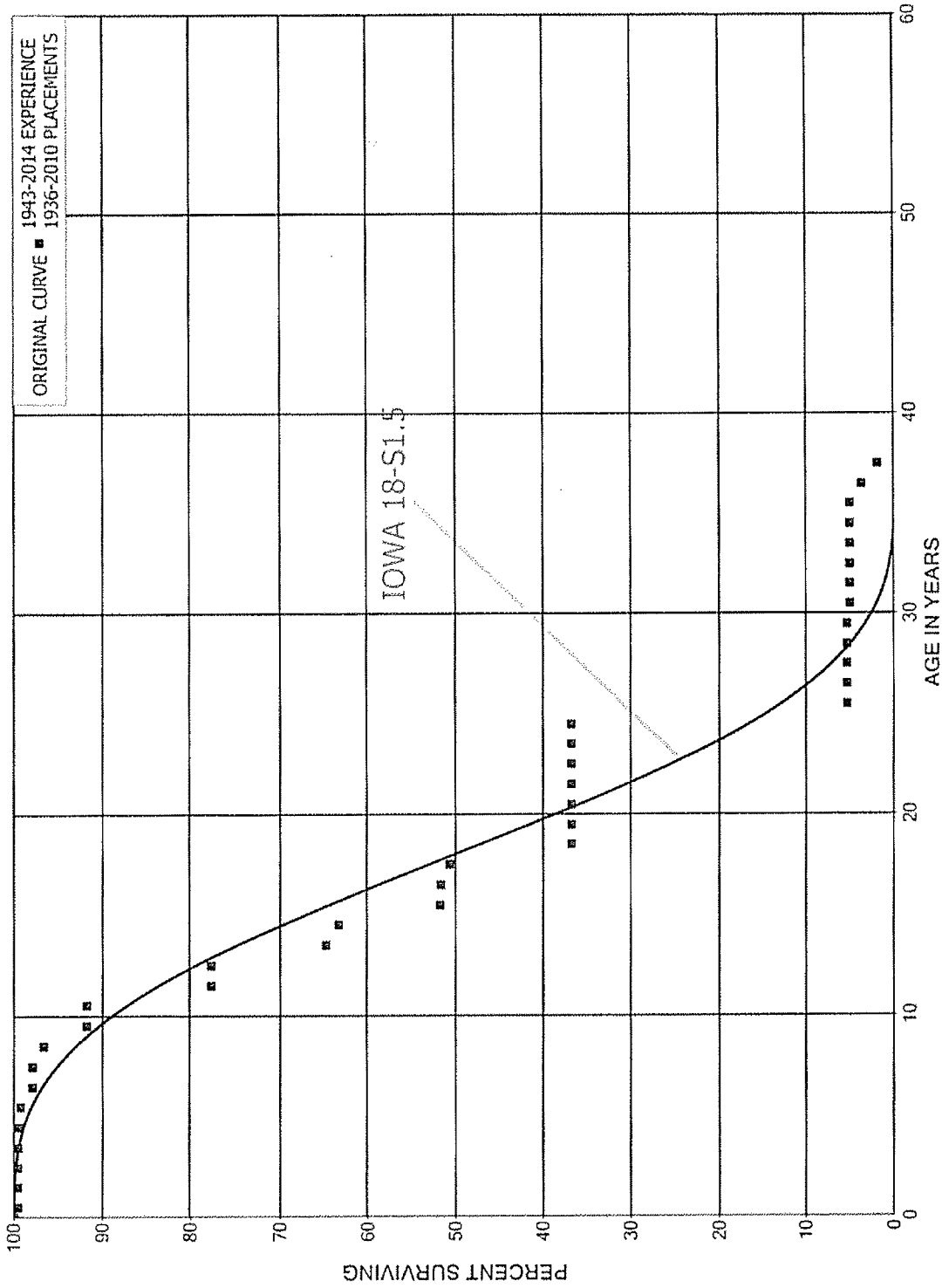
PENNSYLVANIA POWER COMPANY

ACCOUNT 392 TRANSPORTATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1928-2013			EXPERIENCE BAND 1943-2014			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
39.5	44,409	4,802	0.1081	0.8919	0.23	
40.5	23,083	4,089	0.1771	0.8229	0.21	
41.5	18,994	1,273	0.0670	0.9330	0.17	
42.5	20,572	4,876	0.2370	0.7630	0.16	
43.5	14,383	2,338	0.1625	0.8375	0.12	
44.5	12,046	1,672	0.1388	0.8612	0.10	
45.5	10,374	34	0.0033	0.9967	0.09	
46.5	10,340	1,494	0.1445	0.8555	0.09	
47.5	8,846		0.0000	1.0000	0.07	
48.5	8,846	3,291	0.3721	0.6279	0.07	
49.5	5,555	1,748	0.3147	0.6853	0.05	
50.5	3,807		0.0000	1.0000	0.03	
51.5	2,273	1,809	0.7958	0.2042	0.03	
52.5	464		0.0000	1.0000	0.01	
53.5	464		0.0000	1.0000	0.01	
54.5	464		0.0000	1.0000	0.01	
55.5	464		0.0000	1.0000	0.01	
56.5	464	322	0.6934	0.3066	0.01	
57.5	1,315	286	0.2178	0.7822	0.00	
58.5	1,029	327	0.3178	0.6822	0.00	
59.5	702	688	0.9801	0.0199	0.00	
60.5	14	14	1.0000		0.00	
61.5						

PENNSYLVANIA POWER COMPANY
ACCOUNT 396 POWER OPERATED EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA POWER COMPANY

ACCOUNT 396 POWER OPERATED EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1936-2010

EXPERIENCE BAND 1943-2014

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	732,786	3,538	0.0048	0.9952	100.00
0.5	729,248		0.0000	1.0000	99.52
1.5	729,248		0.0000	1.0000	99.52
2.5	726,030		0.0000	1.0000	99.52
3.5	694,347	1,200	0.0017	0.9983	99.52
4.5	630,643	1,403	0.0022	0.9978	99.35
5.5	502,990	6,406	0.0127	0.9873	99.12
6.5	260,700		0.0000	1.0000	97.86
7.5	260,700	3,200	0.0123	0.9877	97.86
8.5	257,500	13,189	0.0512	0.9488	96.66
9.5	254,300		0.0000	1.0000	91.71
10.5	254,300	39,157	0.1540	0.8460	91.71
11.5	215,143		0.0000	1.0000	77.59
12.5	215,143	35,601	0.1655	0.8345	77.59
13.5	179,542	4,073	0.0227	0.9773	64.75
14.5	175,469	32,135	0.1831	0.8169	63.28
15.5	146,954	99	0.0007	0.9993	51.69
16.5	146,855	3,012	0.0205	0.9795	51.66
17.5	143,843	39,465	0.2744	0.7256	50.60
18.5	104,378		0.0000	1.0000	36.72
19.5	104,378		0.0000	1.0000	36.72
20.5	104,378		0.0000	1.0000	36.72
21.5	104,378		0.0000	1.0000	36.72
22.5	100,758		0.0000	1.0000	36.72
23.5	100,758		0.0000	1.0000	36.72
24.5	100,758	86,209	0.8556	0.1444	36.72
25.5	14,549		0.0000	1.0000	5.30
26.5	14,549		0.0000	1.0000	5.30
27.5	14,549		0.0000	1.0000	5.30
28.5	14,549		0.0000	1.0000	5.30
29.5	14,548	808	0.0556	0.9444	5.30
30.5	13,740		0.0000	1.0000	5.01
31.5	13,740		0.0000	1.0000	5.01
32.5	13,740		0.0000	1.0000	5.01
33.5	13,740		0.0000	1.0000	5.01
34.5	13,740		0.0000	1.0000	5.01
35.5	13,740	3,713	0.2702	0.7298	5.01
36.5	10,027	5,124	0.5110	0.4890	3.65
37.5	4,903		0.0000	1.0000	1.79
38.5	4,903		0.0000	1.0000	1.79

PENNSYLVANIA POWER COMPANY
 ACCOUNT 396 POWER OPERATED EQUIPMENT
 ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1936-2010			EXPERIENCE BAND 1943-2014		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	4,903		0.0000	1.0000	1.79
40.5	4,903	4,903	1.0000	0.0000	1.79
41.5	0		0.0000	1.0000	0.00
42.5					0.00

**PART VII. DETAILED DEPRECIATION
CALCULATIONS**

CUMULATIVE DEPRECIATED ORIGINAL COST

PENNSYLVANIA POWER COMPANY

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	AMOUNT		CUMULATIVE AMOUNT (5)	DEPRECIATED ORIGINAL COST
			(2)	(3)		PCT OF COL 4 TOTAL (6)
1892	13,916	13,916				0.0
1902	6,695	6,695				0.0
1905	232	232				0.0
1909	41	41				0.0
1910	96	97		1-	1-	0.0
1913	46,511	46,511			1-	0.0
1916	62,957	62,958		1-	2-	0.0
1923	4,030	3,959		71	69	0.0
1924	1,345	1,225		120	189	0.0
1925	217	217			189	0.0
1926	1,627	1,292		335	524	0.0
1927	48,520	46,079		2,441	2,965	0.0
1928	13,498	12,016		1,482	4,447	0.0
1929	101,726	93,790		7,936	12,383	0.0
1930	117,535	107,679		9,856	22,239	0.0
1931	12,670	10,378		2,292	24,531	0.0
1932	4,719	3,754		965	25,496	0.0
1933	4,762	3,805		957	26,453	0.0
1934	9,515	8,066		1,449	27,902	0.0
1935	9,075	6,980		2,095	29,997	0.0
1936	13,162	9,912		3,250	33,247	0.0
1937	56,630	44,978		11,652	44,899	0.0
1938	34,374	25,462		8,912	53,811	0.0
1939	47,692	39,732		7,960	61,771	0.0
1940	67,938	54,203		13,735	75,506	0.0
1941	41,801	31,776		10,025	85,531	0.0
1942	20,218	16,712		3,506	89,037	0.0
1943	11,502	9,029		2,473	91,510	0.0
1944	18,671	14,613		4,058	95,568	0.0
1945	37,276	28,447		8,829	104,397	0.0
1946	54,638	41,814		12,824	117,221	0.0
1947	134,270	107,352		26,918	144,139	0.0
1948	217,965	168,055		49,910	194,049	0.0
1949	326,044	273,074		52,970	247,019	0.1
1950	317,555	247,187		70,368	317,387	0.1
1951	420,306	348,287		72,019	389,406	0.1
1952	452,267	363,495		88,772	478,178	0.1
1953	609,940	475,795		134,145	612,323	0.1
1954	524,103	405,664		118,439	730,762	0.2
1955	386,146	295,365		90,781	821,543	0.2
1956	668,530	548,397		120,133	941,676	0.2
1957	654,356	494,900		159,456	1,101,132	0.2
1958	821,012	636,529		184,483	1,285,615	0.3
1959	806,563	605,241		201,322	1,486,937	0.3
1960	1,308,933	1,080,835		228,098	1,715,035	0.4

PENNSYLVANIA POWER COMPANY

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	AMOUNT		DEPRECIATED ORIGINAL COST CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
			(2)	(3)		
1961	734,115	530,783		203,332	1,918,367	0.4
1962	1,019,332	737,190		282,142	2,200,509	0.5
1963	819,765	595,942		223,823	2,424,332	0.5
1964	876,299	623,959		252,340	2,676,672	0.6
1965	1,076,042	765,372		310,670	2,987,342	0.7
1966	1,437,838	1,022,599		415,239	3,402,581	0.8
1967	1,808,634	1,287,510		521,124	3,923,705	0.9
1968	1,526,532	1,069,490		457,042	4,380,747	1.0
1969	1,540,662	1,077,577		463,085	4,843,832	1.1
1970	1,652,436	1,175,065		477,371	5,321,203	1.2
1971	2,103,676	1,481,480		622,196	5,943,399	1.3
1972	2,168,924	1,530,469		638,455	6,581,854	1.5
1973	2,495,825	1,766,759		729,066	7,310,920	1.6
1974	2,852,434	1,966,096		886,338	8,197,258	1.8
1975	2,560,760	1,827,206		733,554	8,930,812	2.0
1976	2,135,408	1,473,803		661,605	9,592,417	2.1
1977	2,236,408	1,489,741		746,667	10,339,084	2.3
1978	3,505,053	2,332,487	1,172,566		11,511,650	2.5
1979	4,321,650	2,828,709	1,492,941		13,004,591	2.9
1980	4,455,881	2,793,994	1,661,887		14,666,478	3.2
1981	3,832,419	2,335,989	1,496,430		16,162,908	3.6
1982	3,860,611	2,381,300	1,479,311		17,642,219	3.9
1983	4,249,007	2,496,703	1,752,304		19,394,523	4.3
1984	5,219,928	3,066,520	2,153,408		21,547,931	4.8
1985	5,720,943	3,212,172	2,508,771		24,056,702	5.3
1986	7,061,775	4,056,443	3,005,332		27,062,034	6.0
1987	6,302,294	3,589,260	2,713,034		29,775,068	6.6
1988	8,119,419	4,414,551	3,704,868		33,479,936	7.4
1989	7,832,455	4,253,616	3,578,839		37,058,775	8.2
1990	10,615,410	5,697,547	4,917,863		41,976,638	9.3
1991	11,715,790	5,912,811	5,802,979		47,779,617	10.5
1992	12,446,882	6,034,723	6,412,159		54,191,776	12.0
1993	13,505,885	6,404,715	7,101,170		61,292,946	13.5
1994	15,166,526	7,113,907	8,052,619		69,345,565	15.3
1995	11,950,005	5,119,715	6,830,290		76,175,855	16.8
1996	12,377,698	5,119,073	7,258,625		83,434,480	18.4
1997	9,298,033	3,618,681	5,679,352		89,113,832	19.7
1998	10,599,831	3,896,204	6,703,627		95,817,459	21.1
1999	15,535,661	5,840,419	9,695,242		105,512,701	23.3
2000	6,835,665	2,221,525	4,614,140		110,126,841	24.3
2001	7,406,238	2,406,106	5,000,132		115,126,973	25.4
2002	8,283,711	2,440,696	5,843,015		120,969,988	26.7
2003	17,294,816	7,465,750	9,829,066		130,799,054	28.8
2004	15,851,866	4,994,148	10,857,718		141,656,772	31.2
2005	22,438,812	5,744,688	16,694,124		158,350,896	34.9

PENNSYLVANIA POWER COMPANY

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	AMOUNT		DEPRECIATED ORIGINAL COST CUMULATIVE AMOUNT (5)		PCT OF COL 4 TOTAL (6)
			(2)	(3)	(4)	(5)	(6)
2006	16,712,682	4,198,528	12,514,154		170,865,050	37.7	
2007	21,115,902	5,560,143	15,555,759		186,420,809	41.1	
2008	33,478,891	6,541,294	26,937,597		213,358,406	47.1	
2009	22,983,909	4,433,822	18,550,087		231,908,493	51.1	
2010	25,300,791	4,141,200	21,159,591		253,068,084	55.8	
2011	27,175,693	4,789,826	22,385,867		275,453,951	60.7	
2012	18,941,051	2,221,173	16,719,878		292,173,829	64.4	
2013	31,992,658	3,080,143	28,912,515		321,086,344	70.8	
2014	35,232,699	3,790,961	31,441,738		352,528,082	77.7	
2015	61,022,538	5,310,049	55,712,489		408,240,571	90.0	
2016	46,275,577	1,077,442	45,198,135		453,438,706	100.0	
TOTAL	643,593,324	190,154,618	453,438,706				

UTILITY PLANT IN SERVICE

PENNSYLVANIA POWER COMPANY

ACCOUNT 303 MISCELLANEOUS INTANGIBLE PLANT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 7-SQUARE						
NET SALVAGE PERCENT.. 0						
1993	99,278.97	99,279	99,279			
1994	446,063.10	446,063	446,063			
1997	8,663.23	8,663	8,663			
2000	2.32	2	2			
2001	3,197.36	3,197	3,197			
2002	33,814.52	33,815	33,815			
2003	3,440,300.85	3,440,301	3,440,301			
2004	946,850.53	946,851	946,851			
2005	214,018.90	214,019	214,019			
2006	338,760.01	338,760	338,760			
2007	1,360,073.16	1,360,073	1,360,073			
2008	203,737.79	203,738	203,738			
2009	571,873.64	571,874	571,874			
2010	222,528.47	206,633	204,452	18,076	0.50	18,076
2011	765,152.22	601,188	594,842	170,310	1.50	113,540
2012	322,349.33	207,225	205,038	117,311	2.50	46,924
2013	613,591.02	306,796	303,558	310,033	3.50	88,581
2014	1,367,046.91	488,227	483,073	883,974	4.50	196,439
2015	763,973.34	163,712	161,984	601,989	5.50	109,453
2016	398,397.57	28,458	28,158	370,240	6.50	56,960
	12,119,673.24	9,668,874	9,647,740	2,471,933		629,973
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					3.9	5.20

PENNSYLVANIA POWER COMPANY

ACCOUNT 303.1 MISCELLANEOUS INTANGIBLE PLANT - SMART METER SOFTWARE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 7-SQUARE						
NET SALVAGE PERCENT.. 0						
2014	618,192.34	220,781	196,321	421,871	4.50	93,749
2015	2,213,648.57	474,363	421,808	1,791,841	5.50	325,789
2016	1,257,495.90	89,823	79,872	1,177,624	6.50	181,173
	4,089,336.81	784,967	698,001	3,391,336		600,711
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.6						14.69

PENNSYLVANIA POWER COMPANY

ACCOUNT 352.1 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R4						
NET SALVAGE PERCENT.. 0						
1892	13,916.46	13,916	13,916			
1902	6,694.84	6,695	6,695			
1905	231.68	232	232			
1910	39.90	40	40			
1916	60,448.97	60,449	60,449			
1924	43.93	43	44			
1927	8,724.08	8,511	8,724			
1928	177.84	173	178			
1929	1,767.51	1,717	1,768			
1930	14,505.87	14,053	14,506			
1934	1,584.41	1,516	1,584			
1937	73.90	70	74			
1939	22.85	21	23			
1940	2,686.64	2,507	2,687			
1947	1,236.71	1,117	1,237			
1948	143.92	129	144			
1949	25,332.31	22,571	25,332			
1950	5,551.99	4,947	5,552			
1951	2,081.51	1,840	2,082			
1952	33,072.03	29,011	33,072			
1953	10,213.52	8,886	10,214			
1954	6,627.96	5,717	6,628			
1955	1,809.72	1,547	1,810			
1956	4,607.45	3,903	4,607			
1957	6,127.12	5,141	6,127			
1958	14,126.41	11,651	14,126			
1959	2,837.39	2,317	2,837			
1961	7.14	6	7			
1962	4,535.32	3,584	4,535			
1963	4,319.60	3,351	4,248	72	15.46	5
1964	5,403.39	4,142	5,251	152	15.99	10
1965	78.02	59	75	3	16.53	
1966	6,356.12	4,751	6,023	333	17.07	20
1967	6,231.00	4,596	5,827	404	17.61	23
1968	4,648.62	3,359	4,258	391	18.62	21
1969	356.16	254	322	34	19.17	2
1970	311.02	218	276	35	19.72	2
1971	9,172.95	6,302	7,989	1,184	20.73	57
1972	5,037.91	3,408	4,320	718	21.29	34
1973	3,867.63	2,574	3,263	605	21.86	28
1974	13,131.54	8,538	10,824	2,308	22.86	101
1975	29,166.31	18,640	23,631	5,535	23.44	236

PENNSYLVANIA POWER COMPANY

ACCOUNT 352.1 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R4						
NET SALVAGE PERCENT.. 0						
1976	35,881.62	22,379	28,371	7,511	24.44	307
1977	3,830.92	2,345	2,973	858	25.02	34
1978	17,998.16	10,810	13,704	4,294	25.60	168
1979	52,736.79	30,851	39,111	13,626	26.60	512
1982	28,737.55	15,665	19,859	8,879	28.79	308
1984	20,936.53	10,751	13,629	7,308	30.79	237
1985	6,426.42	3,218	4,080	2,346	31.40	75
1986	18,049.02	8,754	11,098	6,951	32.39	215
1988	8,340.21	3,803	4,821	3,519	34.00	104
1989	25,492.68	11,217	14,220	11,273	35.00	322
1990	51,854.52	21,986	27,873	23,982	36.00	666
1991	16,292.51	6,690	8,481	7,812	36.61	213
1992	10,310.34	4,066	5,155	5,155	37.61	137
1993	43,358.46	16,407	20,800	22,558	38.61	584
1994	2,144.77	777	985	1,160	39.61	29
2013	104,744.96	5,970	7,568	97,177	57.85	1,680
2015	152.85	4	5	148	59.48	2
	764,597.96	448,195	528,270	236,328		6,132

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 38.5 0.80

PENNSYLVANIA POWER COMPANY

ACCOUNT 352.2 STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R4						
NET SALVAGE PERCENT.. 0						
1982	13,229.30	7,211	8,489	4,740	28.79	165
1984	39,203.31	20,131	23,699	15,504	30.79	504
1985	3,143.26	1,574	1,853	1,290	31.40	41
1986	26,663.57	12,932	15,224	11,440	32.39	353
1988	6,076.93	2,771	3,262	2,815	34.00	83
1989	21,430.98	9,430	11,102	10,329	35.00	295
1990	23,239.46	9,854	11,601	11,638	36.00	323
1991	48,827.78	20,049	23,603	25,225	36.61	689
1992	12,619.20	4,977	5,860	6,759	37.61	180
1993	782.14	296	348	434	38.61	11
	195,215.93	89,225	105,041	90,175		2,644

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 34.1 1.35

PENNSYLVANIA POWER COMPANY

ACCOUNT 353 STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 58-R2						
NET SALVAGE PERCENT.. 0						
1909	41.23	41	41			
1916	862.00	849	862			
1927	1,733.65	1,645	1,734			
1928	216.04	205	216			
1929	38,721.55	36,592	38,722			
1930	35,159.80	33,149	35,160			
1931	449.00	418	449			
1932	119.88	111	120			
1937	242.76	222	243			
1939	9,738.58	8,831	9,739			
1940	463.62	419	464			
1941	155.42	140	155			
1942	180.32	161	180			
1943	33.60	30	34			
1944	1,085.36	960	1,085			
1945	227.88	200	228			
1946	1,238.53	1,083	1,239			
1948	474.69	410	475			
1949	49,291.90	42,253	49,292			
1950	29,870.55	25,426	29,871			
1951	33,747.50	28,517	33,748			
1952	25,688.62	21,540	25,689			
1953	49,735.60	41,688	49,736			
1954	35,514.59	29,520	35,515			
1955	12,366.39	10,191	12,366			
1956	24,240.10	19,799	24,240			
1957	32,790.95	26,534	32,791			
1958	94,368.17	75,627	94,368			
1959	24,518.34	19,455	24,518			
1960	5,859.49	4,602	5,859			
1961	6,070.94	4,751	6,071			
1962	23,625.78	18,284	23,626			
1963	27,556.99	21,081	27,557			
1964	8,363.66	6,323	8,364			
1965	43,974.57	32,840	43,975			
1966	60,574.02	44,661	60,574			
1967	43,233.66	31,673	43,234			
1968	48,666.90	35,167	48,667			
1969	12,264.53	8,738	12,265			
1970	29,195.12	20,501	29,195			
1971	128,498.28	88,869	128,498			
1972	39,189.73	26,680	39,190			

PENNSYLVANIA POWER COMPANY

ACCOUNT 353 STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 58-R2						
NET SALVAGE PERCENT.. 0						
1973	63,794.82	43,010	63,695	100	21.02	5
1974	72,094.98	47,799	70,788	1,307	21.60	61
1975	222,163.45	144,762	214,384	7,779	22.19	351
1976	140,974.87	90,210	133,596	7,379	22.79	324
1977	83,335.49	52,335	77,505	5,830	23.40	249
1978	374,416.88	232,064	343,674	30,743	23.61	1,302
1979	318,711.15	193,617	286,736	31,975	24.23	1,320
1980	39,863.49	23,719	35,127	4,736	24.85	191
1981	30,851.19	17,962	26,601	4,250	25.48	167
1982	150,010.68	85,911	127,229	22,782	25.74	885
1983	87,184.01	48,771	72,227	14,957	26.38	567
1984	277,584.98	151,561	224,453	53,132	27.02	1,966
1985	198,696.60	105,786	156,663	42,034	27.67	1,519
1986	247,969.63	129,341	191,547	56,423	27.98	2,017
1987	867.95	440	652	216	28.64	8
1988	75,164.52	37,056	54,878	20,287	29.31	692
1989	179,799.81	86,520	128,131	51,669	29.65	1,743
1990	276,889.50	129,141	191,251	85,638	30.32	2,824
1991	539,140.12	243,368	360,414	178,726	30.99	5,767
1992	249,365.88	109,372	161,974	87,392	31.36	2,787
1993	313,176.03	132,473	196,185	116,991	32.06	3,649
1994	158,743.51	65,005	96,269	62,475	32.45	1,925
1995	151,659.94	59,663	88,358	63,302	33.15	1,910
1996	31,707.70	12,024	17,807	13,901	33.56	414
1997	973.99	353	523	451	34.26	13
1999	42,368.02	14,015	20,755	21,613	35.41	610
2000	133,700.87	42,143	62,411	71,290	35.85	1,989
2001	17,252.80	5,162	7,645	9,608	36.31	265
2002	84,278.95	23,708	35,110	49,169	37.05	1,327
2003	412,722.61	109,206	161,728	250,995	37.52	6,690
2006	137,385.34	29,139	43,153	94,232	39.00	2,416
2008	96,983.54	17,069	25,278	71,706	39.81	1,801
2011	38,981.24	4,631	6,858	32,123	40.80	787
2012	137,041.89	13,567	20,092	116,950	40.95	2,856
2013	40,864.62	3,220	4,769	36,096	40.94	882
2014	10,058.15	581	860	9,198	40.79	225
2015	604.29	22	33	571	40.17	14
	6,417,733.78	3,274,912	4,689,714	1,728,020		52,518

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 32.9 0.82

PENNSYLVANIA POWER COMPANY

ACCOUNT 354 TOWERS AND FIXTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 70-R4						
NET SALVAGE PERCENT.. 0						
1947	7,576.09	6,634	7,529	47	9.87	5
	7,576.09	6,634	7,529	47		5
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						9.4 0.07

PENNSYLVANIA POWER COMPANY

ACCOUNT 355 POLES AND FIXTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 62-R1.5						
NET SALVAGE PERCENT.. 0						
1927	316.66	286	300	17	9.50	2
1928	504.84	456	479	26	9.54	3
1929	98.89	89	93	6	9.59	1
1930	1,742.17	1,567	1,646	96	9.65	10
1932	279.13	248	260	19	10.74	2
1935	208.63	184	193	16	11.09	1
1936	371.02	323	339	32	12.09	3
1937	962.88	834	876	87	12.24	7
1938	323.35	279	293	30	12.41	2
1939	2,217.33	1,907	2,003	214	12.59	17
1941	2,534.95	2,163	2,272	263	12.99	20
1942	2,293.74	1,948	2,046	248	13.22	19
1943	1,951.95	1,636	1,718	234	14.22	16
1944	372.89	311	327	46	14.45	3
1945	318.95	265	278	41	14.71	3
1947	7,141.75	5,857	6,152	990	15.25	65
1948	1,461.31	1,191	1,251	210	15.53	14
1949	13,157.45	10,658	11,195	1,962	15.83	124
1950	1,258.74	1,013	1,064	195	16.15	12
1951	7,580.85	6,058	6,363	1,218	16.47	74
1952	11,206.34	8,891	9,339	1,867	16.80	111
1953	7,014.64	5,523	5,801	1,214	17.15	71
1954	10,897.15	8,513	8,942	1,955	17.50	112
1955	13,073.55	10,131	10,641	2,433	17.87	136
1956	3,140.24	2,413	2,535	605	18.24	33
1957	3,845.19	2,928	3,075	770	18.62	41
1958	4,824.99	3,641	3,824	1,001	19.02	53
1959	12,951.03	9,681	10,169	2,782	19.42	143
1960	8,303.54	6,146	6,456	1,848	19.83	93
1961	3,332.54	2,441	2,564	769	20.26	38
1962	6,385.91	4,629	4,862	1,524	20.69	74
1963	2,573.14	1,845	1,938	635	21.13	30
1964	8,895.18	6,305	6,623	2,272	21.57	105
1965	10,057.32	7,044	7,399	2,658	22.03	121
1966	11,276.85	7,801	8,194	3,083	22.50	137
1967	52,663.82	35,975	37,787	14,877	22.96	648
1968	19,347.05	13,044	13,701	5,646	23.44	241
1969	12,536.39	8,337	8,757	3,779	23.93	158
1970	24,782.67	16,248	17,066	7,717	24.43	316
1971	12,065.88	7,796	8,189	3,877	24.92	156
1972	30,479.02	19,397	20,374	10,105	25.43	397
1973	49,389.56	30,938	32,496	16,894	25.94	651

PENNSYLVANIA POWER COMPANY

ACCOUNT 355 POLES AND FIXTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 62-R1.5						
NET SALVAGE PERCENT.. 0						
1974	5,218.57	3,216	3,378	1,841	26.47	70
1975	4,692.64	2,843	2,986	1,707	26.99	63
1976	3,570.09	2,126	2,233	1,337	27.52	49
1977	3,798.97	2,221	2,333	1,466	28.07	52
1978	4,284.45	2,474	2,599	1,685	28.17	60
1979	17,811.78	10,085	10,593	7,219	28.73	251
1980	3,848.18	2,135	2,243	1,605	29.29	55
1981	3,738.72	2,031	2,133	1,606	29.86	54
1982	34,090.82	18,112	19,024	15,067	30.44	495
1983	19,060.11	9,961	10,463	8,597	30.60	281
1984	14,653.74	7,476	7,852	6,802	31.20	218
1985	22,343.77	11,120	11,680	10,664	31.79	335
1986	177,170.37	85,928	90,255	86,915	32.39	2,683
1987	34,463.74	16,370	17,194	17,270	32.61	530
1988	5,893.12	2,721	2,858	3,035	33.23	91
1989	6,571.06	2,945	3,093	3,478	33.85	103
1990	29,619.08	12,949	13,601	16,018	34.11	470
1991	21,897.97	9,269	9,736	12,162	34.74	350
1992	54,096.80	22,266	23,387	30,710	35.02	877
1993	47,074.07	18,698	19,640	27,434	35.67	769
1994	21,218.68	8,165	8,576	12,643	35.98	351
1995	51,060.16	18,994	19,950	31,110	36.30	857
1996	44,577.89	15,901	16,702	27,876	36.97	754
1998	7,907.56	2,604	2,735	5,173	37.68	137
1999	18,549.71	5,843	6,137	12,413	38.06	326
2000	8,064.90	2,422	2,544	5,521	38.45	144
2003	173,837.44	44,120	46,342	127,495	39.69	3,212
2004	604,099.13	144,259	151,523	452,576	39.85	11,357
2005	8,833.08	1,971	2,070	6,763	40.05	169
2006	19,600.29	4,053	4,257	15,343	40.26	381
2007	23,299.06	4,427	4,650	18,649	40.50	460
2008	152,089.61	26,251	27,573	124,517	40.76	3,055
2009	69,961.92	10,858	11,405	58,557	40.81	1,435
2010	24,447.25	3,354	3,523	20,924	40.89	512
2011	339,996.70	40,596	42,641	297,356	40.58	7,328
2012	14,408.98	1,447	1,520	12,889	40.34	320
2013	54,949.94	4,423	4,646	50,304	39.98	1,258

PENNSYLVANIA POWER COMPANY

ACCOUNT 355 POLES AND FIXTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 62-R1.5						
NET SALVAGE PERCENT.. 0						
2014	2,107.46	126	132	1,975	39.17	50
2015	150,301.68	5,742	6,031	144,271	37.72	3,825
2016	158,203.90	2,310	2,426	155,778	33.63	4,632
	2,825,552.87	849,752	892,544	1,933,009		52,682
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						36.7 1.86

PENNSYLVANIA POWER COMPANY

ACCOUNT 356 OVERHEAD CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 62-R2						
NET SALVAGE PERCENT.. 0						
1913	46,510.86	45,250	46,511			
1916	13.62	13	14			
1923	3,433.93	3,243	3,434			
1925	217.12	203	217			
1927	12,826.88	11,939	12,827			
1928	2,714.90	2,523	2,715			
1929	6,238.05	5,732	6,238			
1930	3,479.66	3,191	3,480			
1931	521.15	477	521			
1934	197.97	180	198			
1936	78.62	70	79			
1937	1,780.73	1,586	1,781			
1938	393.06	349	393			
1939	3,546.49	3,133	3,546			
1940	1,044.00	919	1,044			
1941	2,800.82	2,453	2,801			
1942	2,761.84	2,407	2,762			
1943	194.46	169	194			
1944	13.66	12	14			
1945	297.54	255	298			
1946	155.69	133	156			
1947	13,059.23	11,073	13,059			
1948	7,524.62	6,288	7,525			
1949	26,594.60	22,079	26,595			
1950	3,410.53	2,812	3,393	18	14.15	1
1951	9,797.88	8,023	9,681	117	14.50	8
1952	18,578.53	15,099	18,219	360	14.87	24
1953	6,928.41	5,587	6,741	187	15.24	12
1954	23,355.81	18,685	22,546	810	15.62	52
1955	17,037.65	13,518	16,311	727	16.02	45
1956	1,219.79	959	1,157	63	16.42	4
1957	6,394.65	4,984	6,014	381	16.84	23
1958	3,101.71	2,395	2,890	212	17.26	12
1959	9,127.32	6,981	8,423	704	17.68	40
1960	835.08	632	763	72	18.13	4
1961	2,324.50	1,742	2,102	222	18.58	12
1962	7,077.83	5,246	6,330	748	19.03	39
1963	1,187.51	870	1,050	138	19.49	7
1964	9,147.61	6,627	7,996	1,152	19.96	58
1965	10,017.34	7,170	8,651	1,366	20.45	67
1966	9,534.90	6,741	8,134	1,401	20.93	67
1967	28,666.38	20,009	24,143	4,523	21.42	211

PENNSYLVANIA POWER COMPANY

ACCOUNT 356 OVERHEAD CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 62-R2						
NET SALVAGE PERCENT.. 0						
1968	24,736.08	17,157	20,702	4,034	21.43	188
1969	18,327.73	12,536	15,126	3,202	21.94	146
1970	38,696.56	26,089	31,480	7,217	22.47	321
1971	14,785.09	9,822	11,851	2,934	22.99	128
1972	33,435.27	21,873	26,393	7,042	23.52	299
1973	90,837.03	58,481	70,565	20,272	24.07	842
1974	4,809.72	3,046	3,675	1,135	24.62	46
1975	1,926.80	1,199	1,447	480	25.17	19
1976	2,860.23	1,749	2,110	750	25.72	29
1977	920.87	553	667	254	26.29	10
1978	326.28	192	232	94	26.86	3
1979	23,953.48	13,833	16,691	7,262	27.44	265
1980	1,327.31	751	906	421	28.01	15
1981	3,305.59	1,831	2,209	1,097	28.60	38
1982	5,026.30	2,740	3,306	1,720	28.79	60
1983	3,582.06	1,908	2,302	1,280	29.40	44
1984	25,794.87	13,413	16,185	9,610	30.00	320
1985	5,808.49	2,946	3,555	2,253	30.61	74
1986	168,621.45	83,316	100,531	68,090	31.23	2,180
1987	15,819.12	7,606	9,178	6,641	31.85	209
1988	5,557.78	2,598	3,135	2,423	32.48	75
1989	6,336.79	2,893	3,491	2,846	32.74	87
1990	7,541.39	3,338	4,028	3,513	33.38	105
1991	12,943.29	5,545	6,691	6,252	34.02	184
1992	16,084.13	6,659	8,035	8,049	34.67	232
1993	11,451.48	4,601	5,552	5,899	34.98	169
1994	13,219.17	5,116	6,173	7,046	35.64	198
1996	69,897.46	25,079	30,261	39,636	36.64	1,082
1997	1,954.42	671	810	1,144	37.32	31
1998	8,508.98	2,786	3,362	5,147	38.00	135
1999	81.74	26	31	51	38.37	1
2000	7,814.47	2,321	2,801	5,013	39.06	128
2001	9,062.63	2,557	3,085	5,978	39.45	152
2002	46,708.77	12,397	14,958	31,751	40.14	791
2003	31,199.66	7,794	9,404	21,796	40.55	538
2004	270,112.12	63,152	76,201	193,911	40.97	4,733
2005	10,482.32	2,279	2,750	7,732	41.41	187
2006	1,766.43	354	427	1,339	41.85	32
2007	35,906.29	6,585	7,946	27,960	42.31	661
2008	126,307.50	20,942	25,269	101,038	42.78	2,362
2009	146,394.48	21,740	26,232	120,162	43.01	2,794
2010	152,879.53	19,874	23,980	128,900	43.50	2,963

PENNSYLVANIA POWER COMPANY

ACCOUNT 356 OVERHEAD CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 62-R2						
NET SALVAGE PERCENT.. 0						
2011	141,523.20	15,794	19,057	122,466	43.76	2,799
2012	67,420.91	6,284	7,583	59,838	43.81	1,366
2013	131,473.32	9,703	11,708	119,765	43.90	2,728
2014	38,807.79	2,103	2,538	36,270	43.59	832
2015	561,531.11	18,980	22,901	538,630	42.94	12,544
	2,722,010.42	804,969	958,466	1,763,544		43,831
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						40.2 1.61

PENNSYLVANIA POWER COMPANY

ACCOUNT 357 UNDERGROUND CONDUIT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-S2.5						
NET SALVAGE PERCENT.. 0						
1973	64,301.63	52,586	54,598	9,704	9.69	1,001
2000	352.23	139	144	208	25.17	8
	64,653.86	52,725	54,742	9,912		1,009
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.8						1.56

PENNSYLVANIA POWER COMPANY

ACCOUNT 358 UNDERGROUND CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 40-S1.5						
NET SALVAGE PERCENT.. 0						
1973	34,544.79	28,551	29,294	5,251	9.13	575
2000	490.91	219	225	266	20.54	13
2009	1,034.11	226	232	802	26.75	30
2015	1.51			2	31.72	
	36,071.32	28,996	29,751	6,320		618
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						10.2 1.71

PENNSYLVANIA POWER COMPANY

ACCOUNT 359 ROADS AND TRAILS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S2.5						
NET SALVAGE PERCENT.. 0						
1966	2,500.63	1,995	2,177	324	12.79	25
1976	3,823.81	2,695	2,942	882	16.97	52
	6,324.44	4,690	5,119	1,205		77
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						15.6 1.22

PENNSYLVANIA POWER COMPANY

ACCOUNT 361.1 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R3						
NET SALVAGE PERCENT.. 0						
1910	56.60	56	57			
1924	64.10	61	64			
1927	1,306.95	1,240	1,307			
1928	260.69	247	261			
1929	3,509.35	3,316	3,509			
1930	2,966.37	2,797	2,966			
1934	1,195.63	1,105	1,196			
1938	220.63	201	221			
1939	33.80	31	34			
1944	516.37	457	516			
1947	1,837.40	1,596	1,837			
1948	213.92	185	214			
1949	6,163.55	5,283	6,164			
1950	6,720.66	5,721	6,721			
1951	4,245.93	3,588	4,246			
1952	16,130.98	13,526	16,131			
1953	13,408.75	11,153	13,409			
1954	9,872.68	8,145	9,873			
1955	2,696.49	2,206	2,696			
1956	7,263.50	5,889	7,264			
1957	9,134.55	7,337	9,135			
1958	12,981.25	10,328	12,981			
1959	4,232.34	3,334	4,232			
1961	10.66	8	10	1	16.45	
1962	6,769.89	5,129	6,644	126	17.44	7
1963	6,449.24	4,830	6,257	192	17.93	11
1964	777.59	576	746	32	18.43	2
1965	116.54	85	110	7	18.92	
1966	26,546.83	19,172	24,836	1,711	19.43	88
1967	4,014.35	2,861	3,706	308	19.94	15
1968	6,947.16	4,885	6,328	619	20.47	30
1969	3,067.30	2,127	2,755	312	20.99	15
1970	464.95	316	409	56	21.99	3
1971	8,254.64	5,521	7,152	1,103	22.53	49
1972	7,533.84	4,962	6,428	1,106	23.07	48
1973	5,784.60	3,750	4,858	927	23.61	39
1974	20,975.11	13,372	17,323	3,652	24.17	151
1975	14,005.54	8,718	11,294	2,712	25.17	108
1976	11,110.29	6,795	8,803	2,307	25.72	90
1977	5,658.93	3,398	4,402	1,257	26.29	48
1978	4,493.82	2,647	3,429	1,065	26.86	40
1979	27,786.09	16,046	20,787	6,999	27.44	255

PENNSYLVANIA POWER COMPANY

ACCOUNT 361.1 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R3						
NET SALVAGE PERCENT.. 0						
1982	5,544.51	2,984	3,866	1,679	29.60	57
1984	13,193.19	6,731	8,720	4,473	31.20	143
1985	4,669.43	2,324	3,011	1,658	31.79	52
1986	35,773.81	17,350	22,476	13,298	32.39	411
1988	12,419.94	5,663	7,336	5,084	34.00	150
1989	36,560.76	16,189	20,972	15,589	34.61	450
1990	44,739.05	19,206	24,881	19,858	35.23	564
1991	20,263.24	8,371	10,844	9,419	36.23	260
1992	10,860.48	4,338	5,620	5,240	36.85	142
1993	139,230.59	53,659	69,513	69,718	37.48	1,860
1994	23,359.73	8,620	11,167	12,193	38.48	317
1995	856.65	304	394	463	39.10	12
1996	64,561.24	21,835	28,286	36,275	40.11	904
2007	224,656.69	36,709	47,555	177,102	48.64	3,641
2008	91,843.47	13,501	17,490	74,353	49.31	1,508
2009	143,671.63	18,649	24,159	119,513	50.30	2,376
2011	10,266.40	988	1,280	8,986	51.65	174
2014	24,649.90	1,097	1,421	23,229	53.68	433
2015	104,052.52	2,789	3,613	100,440	54.37	1,847
2016	20,064.40	183	237	19,827	54.45	364
	1,297,037.49	434,490	554,152	742,885		16,664
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						44.6 1.28

PENNSYLVANIA POWER COMPANY

ACCOUNT 361.2 STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R3						
NET SALVAGE PERCENT.. 0						
1982	10,423.29	5,610	7,177	3,246	29.60	110
1984	22,196.95	11,325	14,488	7,709	31.20	247
1985	4,714.89	2,347	3,003	1,712	31.79	54
1986	27,260.71	13,221	16,914	10,347	32.39	319
1988	9,123.84	4,160	5,322	3,802	34.00	112
1989	32,176.26	14,248	18,228	13,948	34.61	403
1990	52,686.14	22,618	28,936	23,750	35.23	674
1991	55,883.01	23,085	29,533	26,350	36.23	727
1992	17,590.91	7,026	8,988	8,603	36.85	233
1993	43,941.89	16,935	21,665	22,277	37.48	594
1994	22,576.32	8,331	10,658	11,918	38.48	310
2005	137,521.89	27,037	34,589	102,933	46.98	2,191
2007	12,535.66	2,048	2,620	9,916	48.64	204
2012	6.01			6	52.32	
2015	10.94			11	54.37	
	448,648.71	157,991	202,121	246,528		6,178
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						39.9 1.38

PENNSYLVANIA POWER COMPANY

ACCOUNT 362 STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R0.5						
NET SALVAGE PERCENT.. 0						
1916	1,632.60	1,633	1,633			
1923	595.80	579	525	71	2.65	27
1924	208.25	200	181	27	3.65	7
1926	561.77	534	484	78	4.74	16
1927	4,418.80	4,192	3,802	617	4.84	127
1928	230.45	218	198	32	4.95	6
1929	40,939.97	38,328	34,765	6,175	5.96	1,036
1930	40,432.40	37,772	34,261	6,171	6.09	1,013
1931	38.08	35	32	6	6.24	1
1933	57.59	53	48	10	7.41	1
1936	501.07	456	414	87	8.00	11
1937	14.99	13	12	3	8.99	
1938	111.72	100	91	21	9.22	2
1939	5,509.65	4,910	4,454	1,056	9.46	112
1940	15,033.85	13,341	12,101	2,933	9.71	302
1941	783.21	692	628	155	9.97	16
1942	415.83	366	332	84	10.25	8
1943	161.07	141	128	33	10.54	3
1944	4,753.95	4,136	3,752	1,002	10.83	93
1945	948.37	821	745	203	11.14	18
1946	2,339.07	1,995	1,810	529	12.15	44
1948	45,007.73	37,924	34,399	10,609	12.80	829
1949	32,272.97	27,012	24,501	7,772	13.15	591
1950	45,083.64	37,474	33,991	11,093	13.50	822
1951	11,842.59	9,774	8,865	2,978	13.87	215
1952	88,691.59	73,224	66,418	22,274	13.62	1,635
1953	176,458.88	144,555	131,118	45,341	14.02	3,234
1954	83,103.62	67,522	61,246	21,858	14.42	1,516
1955	24,189.79	19,487	17,676	6,514	14.84	439
1956	45,879.42	36,639	33,233	12,646	15.26	829
1957	108,560.03	85,914	77,928	30,632	15.68	1,954
1958	145,342.43	113,934	103,344	41,998	16.13	2,604
1959	22,948.80	17,813	16,157	6,792	16.58	410
1960	17,727.75	13,721	12,446	5,282	16.50	320
1961	36,894.89	28,258	25,631	11,264	16.96	664
1962	53,754.17	40,724	36,939	16,815	17.44	964
1963	23,563.18	17,649	16,008	7,555	17.93	421
1964	22,538.66	16,683	15,132	7,407	18.43	402
1965	108,110.68	79,613	72,213	35,898	18.43	1,948
1966	157,289.89	114,381	103,749	53,541	18.94	2,827
1967	353,483.89	253,731	230,146	123,338	19.46	6,338
1968	208,711.19	148,811	134,979	73,732	19.52	3,777

PENNSYLVANIA POWER COMPANY

ACCOUNT 362 STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R0.5						
NET SALVAGE PERCENT.. 0						
1969	100,543.15	70,682	64,112	36,431	20.07	1,815
1970	107,768.40	75,168	68,181	39,587	20.17	1,963
1971	152,347.40	104,663	94,934	57,413	20.73	2,770
1972	171,138.98	115,758	104,998	66,141	21.29	3,107
1973	227,460.74	152,376	138,212	89,249	21.44	4,163
1974	491,960.29	324,103	293,977	197,983	22.01	8,995
1975	165,816.73	108,046	98,003	67,814	22.19	3,056
1976	141,890.45	91,377	82,883	59,007	22.39	2,635
1977	307,249.88	194,182	176,132	131,118	23.00	5,701
1978	449,991.45	280,660	254,572	195,419	23.23	8,412
1979	768,935.45	472,895	428,938	339,997	23.48	14,480
1980	384,964.22	231,825	210,276	174,688	24.11	7,245
1981	108,697.15	64,436	58,447	50,250	24.38	2,061
1982	223,111.82	130,074	117,983	105,129	24.67	4,261
1983	14,711.48	8,427	7,644	7,067	24.98	283
1984	539,228.46	303,154	274,975	264,253	25.31	10,441
1985	230,056.37	126,807	115,020	115,036	25.65	4,485
1986	581,889.88	314,104	284,907	296,983	26.00	11,422
1987	262,254.72	138,470	125,599	136,656	26.37	5,182
1988	238,886.72	123,218	111,765	127,122	26.75	4,752
1989	785,303.65	395,165	358,433	426,871	27.15	15,723
1990	935,630.29	461,172	418,305	517,325	27.26	18,977
1991	1,970,996.59	944,896	857,066	1,113,931	27.69	40,229
1992	1,657,245.52	775,591	703,498	953,748	27.85	34,246
1993	1,300,612.61	589,958	535,120	765,493	28.31	27,040
1994	1,637,563.32	722,165	655,038	982,525	28.52	34,450
1995	546,566.27	233,821	212,087	334,479	28.75	11,634
1996	569,962.45	236,021	214,082	355,880	29.00	12,272
1997	424,282.36	169,628	153,861	270,421	29.28	9,236
1998	339,561.82	130,663	118,518	221,044	29.58	7,473
1999	663,050.19	245,992	223,126	439,924	29.67	14,827
2000	432,025.95	153,974	139,662	292,364	29.80	9,811
2001	1,228,278.44	418,843	379,910	848,368	29.95	28,326
2002	820,981.89	266,655	241,869	579,113	30.14	19,214
2003	316,172.20	97,760	88,673	227,499	30.17	7,541
2004	717,935.85	209,996	190,476	527,460	30.24	17,442
2005	4,703,249.30	1,298,097	1,177,435	3,525,814	30.17	116,865
2006	766,915.76	198,094	179,681	587,235	30.15	19,477
2007	3,188,889.08	766,609	695,351	2,493,538	30.02	83,063
2008	4,542,040.56	1,003,791	910,486	3,631,555	29.96	121,213
2009	3,040,586.65	613,590	556,555	2,484,032	29.67	83,722
2010	509,109.91	92,353	83,769	425,341	29.34	14,497

PENNSYLVANIA POWER COMPANY

ACCOUNT 362 STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R0.5						
NET SALVAGE PERCENT.. 0						
2011	774,827.12	123,585	112,097	662,730	28.98	22,869
2012	911,604.29	125,072	113,446	798,158	28.29	28,213
2013	1,398,929.00	158,079	143,385	1,255,544	27.46	45,723
2014	1,164,248.43	101,057	91,664	1,072,584	26.32	40,752
2015	7,596,729.04	439,851	398,966	7,197,763	24.41	294,869
2016	1,966,543.08	47,590	43,166	1,923,377	20.12	95,595
	52,509,889.64	15,945,851	14,463,798	38,046,092		1,418,110
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						26.8 2.70

PENNSYLVANIA POWER COMPANY

ACCOUNT 364 POLES, TOWERS AND FIXTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
1928	511.56	493	450	62	3.25	19
1929	45.71	44	40	6	4.24	1
1930	12.92	12	11	2	4.41	
1931	4.90	5	5			
1932	177.67	168	153	25	4.79	5
1933	137.44	130	119	18	4.99	4
1934	252.19	237	216	36	5.22	7
1935	182.84	171	156	27	5.46	5
1936	1,398.70	1,306	1,191	208	5.71	36
1937	21,243.95	19,761	18,024	3,220	5.97	539
1938	4,085.10	3,784	3,451	634	6.25	101
1939	6,251.53	5,765	5,258	994	6.54	152
1940	4,688.32	4,304	3,926	762	6.83	112
1941	5,947.73	5,434	4,956	992	7.14	139
1942	3,895.74	3,541	3,230	666	7.47	89
1943	2,801.25	2,532	2,309	492	7.80	63
1944	3,110.71	2,797	2,551	560	8.15	69
1945	3,446.86	3,081	2,810	637	8.50	75
1946	6,231.91	5,580	5,090	1,142	8.24	139
1947	13,271.19	11,806	10,768	2,503	8.62	290
1948	27,715.64	24,490	22,338	5,378	9.02	596
1949	39,392.60	34,567	31,529	7,864	9.42	835
1950	41,415.37	36,081	32,910	8,505	9.83	865
1951	64,131.78	55,448	50,575	13,557	10.26	1,321
1952	54,633.69	47,220	43,070	11,564	10.13	1,142
1953	100,098.10	85,804	78,263	21,835	10.58	2,064
1954	101,720.75	86,463	78,864	22,857	11.03	2,072
1955	92,720.35	78,126	71,260	21,460	11.49	1,868
1956	135,355.12	113,008	103,076	32,279	11.96	2,699
1957	41,597.45	34,651	31,606	9,991	11.93	837
1958	128,375.41	105,884	96,578	31,797	12.43	2,558
1959	211,286.71	172,516	157,354	53,933	12.92	4,174
1960	217,787.16	175,972	160,507	57,280	13.43	4,265
1961	226,056.06	181,930	165,941	60,115	13.46	4,466
1962	255,621.30	203,398	185,522	70,099	13.99	5,011
1963	246,271.04	193,668	176,648	69,623	14.53	4,792
1964	307,246.52	238,731	217,750	89,497	15.07	5,939
1965	341,275.65	263,635	240,465	100,811	15.17	6,645
1966	454,329.11	346,471	316,021	138,308	15.72	8,798
1967	427,242.46	321,457	293,206	134,036	16.29	8,228
1968	418,951.78	312,915	285,415	133,537	16.44	8,123
1969	474,048.04	348,994	318,323	155,725	17.02	9,150

PENNSYLVANIA POWER COMPANY

ACCOUNT 364 POLES, TOWERS AND FIXTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
1970	436,694.89	316,778	288,938	147,757	17.60	8,395
1971	555,022.19	396,508	361,661	193,361	18.19	10,630
1972	557,878.44	394,755	360,062	197,816	18.39	10,757
1973	513,489.18	357,388	325,979	187,510	19.00	9,869
1974	679,596.55	464,980	424,115	255,482	19.61	13,028
1975	699,378.31	473,059	431,484	267,894	19.85	13,496
1976	581,368.66	386,145	352,209	229,160	20.48	11,189
1977	522,802.14	340,762	310,814	211,988	21.10	10,047
1978	798,246.25	513,272	468,163	330,083	21.38	15,439
1979	901,543.93	567,973	518,057	383,487	22.02	17,415
1980	1,217,844.04	751,166	685,150	532,694	22.67	23,498
1981	1,488,553.14	903,552	824,143	664,410	22.98	28,913
1982	1,273,493.60	755,691	689,277	584,217	23.64	24,713
1983	1,853,804.03	1,074,465	980,036	873,768	24.30	35,958
1984	1,383,008.11	786,655	717,520	665,488	24.64	27,008
1985	1,967,029.95	1,090,521	994,681	972,349	25.32	38,402
1986	1,719,695.43	933,623	851,572	868,123	25.68	33,805
1987	1,935,144.36	1,021,756	931,959	1,003,185	26.37	38,043
1988	2,232,001.12	1,151,266	1,050,087	1,181,914	26.75	44,184
1989	1,940,036.61	970,988	885,653	1,054,384	27.45	38,411
1990	2,177,144.11	1,061,575	968,279	1,208,865	27.85	43,406
1991	2,389,297.06	1,127,270	1,028,200	1,361,097	28.55	47,674
1992	2,485,886.53	1,139,033	1,038,929	1,446,958	28.97	49,947
1993	3,024,464.20	1,336,208	1,218,775	1,805,689	29.69	60,818
1994	3,110,464.66	1,329,724	1,212,861	1,897,604	30.13	62,981
1995	2,295,704.91	942,616	859,774	1,435,931	30.86	46,530
1996	2,605,863.32	1,030,880	940,281	1,665,582	31.32	53,180
1997	2,043,429.04	776,912	708,633	1,334,796	31.78	42,001
1998	2,851,633.70	1,034,002	943,129	1,908,505	32.52	58,687
1999	2,086,213.94	722,873	659,343	1,426,871	33.01	43,225
2000	2,081,188.40	686,792	626,433	1,454,755	33.50	43,426
2001	1,886,510.96	590,667	538,756	1,347,755	34.00	39,640
2002	2,128,244.93	629,535	574,209	1,554,036	34.52	45,018
2003	2,919,020.43	811,780	740,437	2,178,583	35.04	62,174
2004	1,976,173.75	513,805	468,649	1,507,525	35.58	42,370
2005	2,960,727.82	715,016	652,177	2,308,551	36.12	63,913
2006	2,562,290.86	570,366	520,240	2,042,051	36.67	55,687
2007	2,189,444.31	447,085	407,793	1,781,651	37.01	48,140
2008	3,304,333.66	609,319	555,769	2,748,565	37.59	73,120
2009	3,195,842.28	527,314	480,971	2,714,871	37.95	71,538
2010	3,795,656.99	550,370	502,001	3,293,656	38.34	85,907
2011	3,738,168.73	466,523	425,523	3,312,646	38.56	85,909

PENNSYLVANIA POWER COMPANY

ACCOUNT 364 POLES, TOWERS AND FIXTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
2012	3,192,438.05	332,014	302,835	2,889,603	38.79	74,494
2013	2,978,346.93	246,011	224,391	2,753,956	38.87	70,850
2014	5,539,323.34	335,129	305,676	5,233,647	38.82	134,818
2015	4,861,046.49	183,748	167,599	4,693,447	38.18	122,929
2016	8,704,204.97	120,118	109,562	8,594,643	35.86	239,672
	110,824,665.61	36,020,368	32,854,720	77,969,946		2,409,547
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						32.4 2.17

PENNSYLVANIA POWER COMPANY

ACCOUNT 365 OVERHEAD CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R1						
NET SALVAGE PERCENT.. 0						
1926	1,065.28	964	808	257	9.50	27
1927	1,233.61	1,115	934	300	9.50	32
1928	5,597.42	5,053	4,235	1,362	9.54	143
1929	6,447.39	5,810	4,869	1,578	9.59	165
1930	13,016.56	11,598	9,720	3,297	10.58	312
1931	8,506.77	7,564	6,339	2,168	10.65	204
1932	3,428.14	3,041	2,549	879	10.74	82
1933	3,177.79	2,786	2,335	843	11.73	72
1934	4,905.54	4,290	3,595	1,311	11.84	111
1935	7,242.42	6,315	5,292	1,950	11.96	163
1936	10,753.93	9,349	7,835	2,919	12.09	241
1937	30,424.74	26,366	22,097	8,328	12.24	680
1938	28,985.48	24,800	20,784	8,201	13.25	619
1939	19,918.73	16,981	14,231	5,688	13.41	424
1940	27,129.92	23,039	19,309	7,821	13.59	575
1941	29,574.01	25,008	20,959	8,615	13.79	625
1942	7,480.97	6,297	5,277	2,204	14.00	157
1943	5,327.45	4,425	3,709	1,618	14.99	108
1944	7,623.75	6,301	5,281	2,343	15.22	154
1945	22,197.38	18,251	15,296	6,901	15.46	446
1946	34,046.44	27,843	23,335	10,711	15.71	682
1947	73,406.07	59,694	50,028	23,378	15.97	1,464
1948	100,635.26	81,343	68,172	32,463	16.25	1,998
1949	107,878.52	86,648	72,618	35,261	16.54	2,132
1950	150,089.62	118,781	99,548	50,542	17.53	2,883
1951	151,382.99	118,987	99,721	51,662	17.83	2,897
1952	150,796.71	117,682	98,627	52,170	18.15	2,874
1953	183,686.49	142,302	119,260	64,426	18.47	3,488
1954	199,471.01	153,353	128,522	70,949	18.80	3,774
1955	165,210.65	125,990	105,590	59,621	19.15	3,113
1956	177,399.61	134,150	112,428	64,972	19.50	3,332
1957	271,118.53	203,258	170,346	100,773	19.87	5,072
1958	242,598.58	180,251	151,065	91,534	20.24	4,522
1959	281,721.29	207,347	173,773	107,948	20.62	5,235
1960	258,751.23	188,578	158,043	100,708	21.02	4,791
1961	274,763.23	198,242	166,143	108,620	21.42	5,071
1962	428,459.07	305,920	256,385	172,074	21.83	7,882
1963	293,001.92	206,918	173,414	119,588	22.26	5,372
1964	305,315.04	213,171	178,654	126,661	22.69	5,582
1965	333,031.79	229,825	192,612	140,420	23.13	6,071
1966	412,770.80	281,427	235,858	176,913	23.57	7,506
1967	349,580.06	235,337	197,231	152,349	24.03	6,340

PENNSYLVANIA POWER COMPANY

ACCOUNT 365 OVERHEAD CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R1						
NET SALVAGE PERCENT.. 0						
1968	392,293.30	260,640	218,437	173,856	24.50	7,096
1969	393,577.30	257,990	216,216	177,361	24.96	7,106
1970	333,540.04	215,600	180,690	152,850	25.44	6,008
1971	485,641.17	311,587	261,135	224,506	25.42	8,832
1972	410,343.94	259,296	217,311	193,033	25.92	7,447
1973	482,906.10	300,368	251,732	231,174	26.43	8,747
1974	386,740.42	236,685	198,361	188,379	26.94	6,993
1975	330,246.25	198,742	166,562	163,684	27.46	5,961
1976	300,120.39	178,692	149,758	150,362	27.52	5,464
1977	313,317.42	183,165	153,507	159,810	28.07	5,693
1978	533,317.19	305,911	256,378	276,939	28.62	9,676
1979	423,733.19	238,350	199,756	223,977	29.17	7,678
1980	679,548.08	377,013	315,967	363,581	29.29	12,413
1981	550,322.88	298,935	250,531	299,792	29.86	10,040
1982	399,635.57	212,326	177,946	221,690	30.44	7,283
1983	568,970.48	297,344	249,198	319,772	30.60	10,450
1984	694,195.80	354,179	296,830	397,366	31.20	12,736
1985	1,172,087.86	586,982	491,938	680,150	31.40	21,661
1986	768,882.11	375,214	314,459	454,423	32.00	14,201
1987	691,730.27	330,578	277,051	414,679	32.23	12,866
1988	1,226,565.09	569,862	477,590	748,975	32.85	22,800
1989	958,788.87	435,098	364,647	594,142	33.10	17,950
1990	1,314,374.90	581,742	487,546	826,829	33.38	24,770
1991	1,819,607.26	779,520	653,300	1,166,307	34.02	34,283
1992	1,714,119.01	713,931	598,331	1,115,788	34.32	32,511
1993	1,798,274.86	726,863	609,169	1,189,106	34.64	34,328
1994	1,715,648.96	671,677	562,919	1,152,730	34.97	32,963
1995	2,833,924.60	1,072,357	898,721	1,935,204	35.32	54,791
1996	2,653,681.83	968,328	811,536	1,842,146	35.68	51,630
1997	1,895,903.85	669,254	560,888	1,335,016	35.75	37,343
1998	1,668,245.50	564,868	473,404	1,194,842	36.14	33,061
1999	1,757,803.00	569,177	477,016	1,280,787	36.55	35,042
2000	1,546,927.90	479,857	402,158	1,144,770	36.69	31,201
2001	1,312,926.19	388,626	325,700	987,226	36.86	26,783
2002	2,001,190.94	562,935	471,784	1,529,407	37.05	41,280
2003	2,691,753.67	716,006	600,070	2,091,684	37.26	56,138
2004	3,145,433.28	786,358	659,031	2,486,402	37.50	66,304
2005	4,711,577.56	1,105,336	926,360	3,785,218	37.52	100,885
2006	3,787,786.42	827,253	693,304	3,094,482	37.58	82,344
2007	4,571,074.50	920,614	771,548	3,799,526	37.67	100,863
2008	4,799,858.96	885,094	741,779	4,058,080	37.59	107,956
2009	4,573,412.84	764,675	640,859	3,932,554	37.35	105,289

PENNSYLVANIA POWER COMPANY

ACCOUNT 365 OVERHEAD CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R1						
NET SALVAGE PERCENT.. 0						
2010	4,703,390.97	699,865	586,543	4,116,848	37.17	110,757
2011	5,992,904.78	777,879	651,925	5,340,980	36.87	144,860
2012	5,392,663.58	594,272	498,047	4,894,617	36.32	134,764
2013	4,916,862.55	440,551	369,217	4,547,646	35.56	127,887
2014	5,935,074.43	400,618	335,750	5,599,324	34.54	162,111
2015	6,999,491.03	307,978	258,110	6,741,381	32.63	206,601
2016	12,268,720.53	214,703	179,938	12,088,783	28.07	430,666
	116,208,289.81	28,801,294	24,137,780	92,070,510		2,733,933
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						33.7 2.35

PENNSYLVANIA POWER COMPANY

ACCOUNT 365.1 OVERHEAD CONDUCTORS AND DEVICES - CLEARING AND GRADING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R1						
NET SALVAGE PERCENT.. 0						
2004	149,196.07	37,299	37,013	112,183	37.50	2,992
2007	1,124,793.26	226,533	224,794	899,999	37.67	23,892
2008	11,514,810.25	2,123,331	2,107,027	9,407,783	37.59	250,274
2009	2,680,789.05	448,228	444,786	2,236,003	37.35	59,866
2010	6,827,436.70	1,015,923	1,008,122	5,819,315	37.17	156,559
2011	3,990,494.35	517,966	513,989	3,476,505	36.87	94,291
2012	434,935.88	47,930	47,562	387,374	36.32	10,666
2013	11,750,658.82	1,052,859	1,044,775	10,705,884	35.56	301,065
2014	5,630,964.89	380,090	377,171	5,253,794	34.54	152,108
2015	4,487,367.85	197,444	195,928	4,291,440	32.63	131,518
	48,591,447.12	6,047,603	6,001,167	42,590,280		1,183,231
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						36.0 2.44

PENNSYLVANIA POWER COMPANY

ACCOUNT 366 UNDERGROUND CONDUIT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R2.5						
NET SALVAGE PERCENT.. 0						
1924	1,028.74	980	936	93	4.58	20
1927	15,997.04	15,176	14,489	1,508	4.84	312
1930	1,129.63	1,055	1,007	123	6.09	20
1938	108.67	99	95	14	7.71	2
1940	16,059.08	14,497	13,840	2,219	8.25	269
1942	413.93	370	353	61	8.83	7
1948	395.60	344	328	68	10.24	7
1949	436.79	377	360	77	10.62	7
1955	30.81	26	25	6	12.58	
1956	1,235.29	1,016	970	265	13.03	20
1957	14,777.68	12,047	11,501	3,277	13.49	243
1958	2,434.84	1,966	1,877	558	13.96	40
1959	827.09	666	636	191	13.93	14
1960	20.49	16	15	5	14.43	
1965	24,733.85	18,597	17,755	6,979	16.99	411
1966	8,381.54	6,222	5,940	2,442	17.52	139
1967	25,065.65	18,363	17,531	7,535	18.07	417
1968	12,338.01	8,915	8,511	3,827	18.62	206
1969	12,201.12	8,693	8,299	3,902	19.17	204
1970	99,600.06	70,397	67,209	32,391	19.29	1,679
1971	70,493.57	49,078	46,856	23,638	19.86	1,190
1972	21,012.12	14,400	13,748	7,264	20.44	355
1973	56,659.00	38,199	36,469	20,190	21.02	961
1974	178,792.35	118,539	113,171	65,621	21.60	3,038
1975	82,008.86	53,437	51,017	30,992	22.19	1,397
1976	27,769.90	17,770	16,965	10,805	22.79	474
1977	6,907.97	4,338	4,142	2,766	23.40	118
1978	34,377.79	21,177	20,218	14,160	24.00	590
1979	39,182.84	23,659	22,588	16,595	24.61	674
1980	18,032.64	10,663	10,180	7,853	25.23	311
1981	27,542.28	15,936	15,214	12,328	25.85	477
1982	30,793.95	17,423	16,634	14,160	26.48	535
1983	22,714.62	12,557	11,988	10,727	27.10	396
1984	17,033.48	9,190	8,774	8,259	27.74	298
1985	21,207.23	11,155	10,650	10,557	28.38	372
1986	52,465.10	26,883	25,666	26,799	29.02	923
1987	22,266.94	11,102	10,599	11,668	29.67	393
1988	48,375.53	23,438	22,377	25,999	30.32	857
1989	47,169.38	22,179	21,175	25,994	30.98	839
1990	58,586.83	26,704	25,495	33,092	31.64	1,046
1991	57,721.54	25,467	24,314	33,408	32.30	1,034
1992	82,891.42	35,337	33,737	49,154	32.97	1,491

PENNSYLVANIA POWER COMPANY

ACCOUNT 366 UNDERGROUND CONDUIT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R2.5						
NET SALVAGE PERCENT.. 0						
1993	82,230.86	34,011	32,471	49,760	33.32	1,493
1994	519,898.57	207,024	197,649	322,250	34.00	9,478
1995	615,176.68	235,428	224,766	390,411	34.68	11,258
1996	848,647.20	311,454	297,350	551,297	35.36	15,591
1997	486,438.66	170,740	163,008	323,431	36.06	8,969
1998	502,092.87	168,101	160,488	341,605	36.75	9,295
1999	457,177.41	145,611	139,017	318,160	37.45	8,496
2000	159,697.00	48,228	46,044	113,653	38.14	2,980
2001	147,775.76	42,146	40,237	107,539	38.85	2,768
2002	131,311.17	35,415	33,811	97,500	39.26	2,483
2003	290,993.61	73,447	70,121	220,873	39.98	5,525
2004	192,515.07	45,241	43,192	149,323	40.69	3,670
2005	178,475.09	38,800	37,043	141,432	41.41	3,415
2006	199,296.30	39,979	38,169	161,127	41.85	3,850
2007	103,043.68	18,795	17,944	85,100	42.58	1,999
2008	177,044.59	29,195	27,873	149,172	43.05	3,465
2009	86,207.19	12,603	12,032	74,175	43.78	1,694
2010	83,125.57	10,640	10,158	72,968	44.26	1,649
2011	196,697.82	21,519	20,544	176,154	44.75	3,936
2012	119,388.62	10,852	10,361	109,028	45.00	2,423
2013	418,760.19	29,899	28,545	390,215	45.52	8,572
2014	187,573.88	9,754	9,312	178,262	45.58	3,911
2015	135,012.62	4,320	4,125	130,888	45.45	2,880
2016	65,875.38	744	710	65,165	43.75	1,489
	7,645,677.04	2,512,399	2,398,624	5,247,053		143,075

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 36.7 1.87

PENNSYLVANIA POWER COMPANY

ACCOUNT 367 UNDERGROUND CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R2.5						
NET SALVAGE PERCENT.. 0						
1967	13,686.29	11,179	11,414	2,272	11.10	205
1968	32,819.79	26,584	27,142	5,678	11.38	499
1969	21,259.29	16,965	17,321	3,938	12.02	328
1970	131,030.98	103,580	105,755	25,276	12.32	2,052
1971	163,585.61	127,270	129,942	33,644	12.98	2,592
1972	240,829.07	185,390	189,282	51,547	13.31	3,873
1973	209,569.99	159,525	162,874	46,696	13.65	3,421
1974	174,861.85	130,797	133,543	41,319	14.32	2,885
1975	291,179.63	215,094	219,610	71,570	14.68	4,875
1976	162,311.93	117,676	120,147	42,165	15.36	2,745
1977	86,443.49	61,807	63,105	23,338	15.75	1,482
1978	162,382.68	113,782	116,171	46,212	16.45	2,809
1979	270,172.75	186,419	190,333	79,840	16.85	4,738
1980	317,449.25	214,342	218,842	98,607	17.56	5,615
1981	423,456.12	281,090	286,992	136,464	17.98	7,590
1982	248,396.25	161,110	164,493	83,903	18.69	4,489
1983	322,126.88	205,034	209,339	112,788	19.13	5,896
1984	460,003.38	285,570	291,566	168,437	19.85	8,485
1985	400,115.29	243,270	248,378	151,737	20.31	7,471
1986	752,677.37	445,359	454,709	297,968	21.05	14,155
1987	712,551.34	411,997	420,647	291,904	21.52	13,564
1988	1,286,112.74	722,024	737,183	548,930	22.26	24,660
1989	866,230.28	474,001	483,953	382,277	22.75	16,803
1990	1,224,025.60	648,734	662,354	561,672	23.50	23,901
1991	1,233,177.21	635,210	648,546	584,631	24.00	24,360
1992	1,607,154.95	799,399	816,183	790,972	24.76	31,946
1993	2,069,040.30	996,864	1,017,793	1,051,247	25.28	41,584
1994	3,491,435.33	1,618,280	1,652,256	1,839,179	26.04	70,629
1995	1,204,795.41	538,785	550,097	654,698	26.58	24,631
1996	1,404,276.96	601,592	614,223	790,054	27.35	28,887
1997	2,073,905.60	853,205	871,118	1,202,788	27.90	43,111
1998	2,889,917.46	1,133,426	1,157,223	1,732,694	28.67	60,436
1999	5,905,297.05	2,211,534	2,257,966	3,647,331	29.23	124,780
2000	1,334,146.69	473,355	483,293	850,854	30.01	28,352
2001	1,250,815.07	420,774	429,608	821,207	30.58	26,854
2002	1,521,179.00	483,126	493,269	1,027,910	31.16	32,988
2003	1,877,745.59	557,690	569,399	1,308,347	31.95	40,950
2004	1,562,838.09	433,688	442,793	1,120,045	32.55	34,410
2005	2,184,390.40	562,699	574,513	1,609,877	33.14	48,578
2006	1,818,633.10	431,562	440,623	1,378,010	33.75	40,830
2007	1,073,468.71	231,440	236,299	837,170	34.56	24,224
2008	1,049,820.45	204,295	208,584	841,236	35.17	23,919

PENNSYLVANIA POWER COMPANY

ACCOUNT 367 UNDERGROUND CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R2.5						
NET SALVAGE PERCENT.. 0						
2009	1,605,291.29	279,321	285,185	1,320,106	35.60	37,082
2010	1,057,358.92	160,824	164,201	893,158	36.24	24,646
2011	2,611,709.30	339,000	346,117	2,265,592	36.87	61,448
2012	2,780,136.68	299,143	305,424	2,474,713	37.34	66,275
2013	2,846,771.36	241,976	247,056	2,599,715	37.65	69,050
2014	2,464,822.11	152,326	155,524	2,309,298	37.98	60,803
2015	3,536,786.35	134,752	137,582	3,399,204	37.87	89,760
2016	4,791,727.41	64,209	65,557	4,726,170	36.68	128,849
	66,219,918.64	20,407,074	20,835,527	45,384,392		1,454,515
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						31.2 2.20

PENNSYLVANIA POWER COMPANY

ACCOUNT 368 LINE TRANSFORMERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 44-R1.5						
NET SALVAGE PERCENT.. 0						
1928	34.40	34	34			
1929	3,363.57	3,355	3,192	172	0.22	172
1930	3,141.92	3,126	2,974	168	0.45	168
1931	2,107.86	2,091	1,990	118	0.71	118
1932	713.86	706	672	42	0.97	42
1933	1,389.16	1,369	1,303	86	1.25	69
1934	1,378.91	1,342	1,277	102	2.25	45
1935	1,314.87	1,275	1,213	102	2.54	40
1936	58.53	57	54	5	2.83	2
1937	166.68	160	152	15	3.14	5
1938	145.67	141	134	12	2.80	4
1939	105.33	101	96	9	3.15	3
1940	7.84	7	7	1	3.50	
1941	5.29	5	5			
1942	2,634.53	2,512	2,390	245	3.62	68
1943	974.79	924	879	96	4.02	24
1944	1,044.65	985	937	108	4.42	24
1945	9,616.04	9,006	8,569	1,047	4.84	216
1946	4,106.77	3,851	3,664	443	4.69	94
1948	9,859.47	9,118	8,676	1,183	5.57	212
1949	223.26	206	196	27	5.49	5
1950	73.03	67	64	9	5.96	2
1951	1,738.58	1,594	1,517	222	5.93	37
1952	3,285.79	2,988	2,843	443	6.43	69
1953	7,456.62	6,771	6,443	1,014	6.43	158
1955	139.66	125	119	21	6.99	3
1956	2,895.69	2,575	2,450	446	7.52	59
1957	87,072.94	77,199	73,457	13,616	7.61	1,789
1958	108,363.76	95,729	91,089	17,275	7.72	2,238
1959	171,931.77	150,268	142,985	28,947	8.29	3,492
1960	128,364.63	111,690	106,277	22,088	8.44	2,617
1961	126,465.80	109,494	104,187	22,279	8.60	2,591
1962	107,091.65	91,628	87,187	19,905	9.20	2,164
1963	127,588.64	108,527	103,267	24,322	9.40	2,587
1964	118,813.50	100,421	95,554	23,260	9.61	2,420
1965	103,041.47	85,967	81,800	21,241	10.23	2,076
1966	163,904.69	135,746	129,167	34,738	10.48	3,315
1967	370,063.93	304,082	289,344	80,720	10.74	7,516
1968	247,994.01	202,066	192,272	55,722	11.02	5,056
1969	258,105.24	208,420	198,318	59,787	11.32	5,282
1970	268,771.90	214,964	204,545	64,227	11.64	5,518
1971	326,493.81	258,485	245,957	80,537	11.97	6,728

PENNSYLVANIA POWER COMPANY

ACCOUNT 368 LINE TRANSFORMERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 44-R1.5						
NET SALVAGE PERCENT.. 0						
1972	399,258.65	310,943	295,872	103,387	12.64	8,179
1973	374,856.78	288,640	274,650	100,207	12.99	7,714
1974	449,823.51	342,226	325,639	124,185	13.36	9,295
1975	390,087.81	293,034	278,831	111,257	13.75	8,091
1976	499,885.13	370,515	352,557	147,328	14.14	10,419
1977	657,316.88	480,367	457,085	200,232	14.55	13,762
1978	813,551.54	585,757	557,367	256,185	14.97	17,113
1979	1,103,417.24	782,102	744,195	359,222	15.41	23,311
1980	936,432.95	652,881	621,237	315,196	15.85	19,886
1981	822,615.78	563,656	536,337	286,279	16.31	17,552
1982	969,857.08	652,520	620,894	348,963	16.78	20,796
1983	909,480.38	600,257	571,164	338,316	17.26	19,601
1984	1,165,515.15	753,855	717,317	448,198	17.75	25,251
1985	1,002,084.68	637,626	606,722	395,363	18.00	21,965
1986	1,555,547.80	967,862	920,952	634,596	18.52	34,265
1987	1,386,154.92	842,366	801,538	584,617	19.04	30,705
1988	1,607,237.31	952,770	906,591	700,646	19.58	35,784
1989	1,351,559.24	780,525	742,695	608,864	20.12	30,262
1990	2,100,481.71	1,185,512	1,128,053	972,429	20.45	47,552
1991	1,555,447.44	852,696	811,368	744,079	21.01	35,415
1992	2,142,262.14	1,138,827	1,083,631	1,058,631	21.59	49,033
1993	2,249,002.61	1,162,734	1,106,379	1,142,624	21.95	52,056
1994	1,683,825.95	841,071	800,306	883,520	22.55	39,180
1995	1,644,629.12	795,672	757,107	887,522	22.94	38,689
1996	1,474,619.76	689,237	655,831	818,789	23.36	35,051
1997	1,244,901.21	558,338	531,277	713,624	23.98	29,759
1998	1,749,894.60	754,205	717,650	1,032,245	24.42	42,270
1999	1,243,428.01	513,536	488,646	754,782	24.87	30,349
2000	889,250.15	350,720	333,721	555,529	25.34	21,923
2001	1,038,548.57	389,560	370,679	667,870	25.82	25,866
2002	1,143,704.24	407,959	388,186	755,518	26.15	28,892
2003	2,995,111.18	1,006,956	958,151	2,036,960	26.66	76,405
2004	5,147,368.93	1,627,598	1,548,712	3,598,657	27.03	133,136
2005	5,524,384.87	1,633,008	1,553,860	3,970,525	27.41	144,857
2006	4,933,197.28	1,351,696	1,286,182	3,647,015	27.82	131,093
2007	6,014,797.50	1,519,939	1,446,271	4,568,526	28.09	162,639
2008	5,611,103.82	1,292,798	1,230,139	4,380,965	28.40	154,259
2009	5,272,429.16	1,095,611	1,042,509	4,229,920	28.60	147,899
2010	5,895,332.78	1,084,741	1,032,166	4,863,167	28.83	168,684
2011	5,727,241.33	913,495	869,220	4,858,021	28.98	167,634
2012	3,852,047.25	518,486	493,356	3,358,691	28.94	116,057
2013	3,611,115.49	391,806	372,816	3,238,299	28.76	112,597

PENNSYLVANIA POWER COMPANY

ACCOUNT 368 LINE TRANSFORMERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 44-R1.5						
NET SALVAGE PERCENT.. 0						
2014	4,138,123.60	335,188	318,942	3,819,182	28.36	134,668
2015	4,370,257.74	226,816	215,823	4,154,435	27.40	151,622
2016	5,451,182.77	109,024	103,740	5,347,443	24.56	217,730
	107,870,422.55	35,914,308	34,173,620	73,696,803		2,906,294
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						25.4 2.69

PENNSYLVANIA POWER COMPANY

ACCOUNT 369 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R4						
NET SALVAGE PERCENT.. 0						
1942	141.58	138	142			
1943	57.92	56	58			
1944	149.80	144	150			
1945	223.15	215	223			
1946	6,519.70	6,251	6,520			
1947	16,741.81	16,057	16,742			
1948	21,262.24	20,246	21,262			
1949	24,777.30	23,583	24,777			
1950	33,618.40	31,746	33,618			
1951	35,214.78	32,982	35,215			
1952	46,205.09	43,211	46,205			
1953	50,159.07	46,818	50,159			
1954	48,883.18	45,217	48,883			
1955	55,748.64	51,428	55,749			
1956	70,812.34	64,694	70,812			
1957	72,591.18	66,087	72,591			
1958	61,711.36	55,596	61,711			
1959	63,770.85	57,202	63,771			
1960	54,872.08	48,984	54,872			
1961	55,260.67	48,762	55,261			
1962	111,068.28	96,852	111,068			
1963	61,924.33	53,670	61,924			
1964	62,184.80	53,218	62,185			
1965	68,543.88	58,249	68,544			
1966	81,932.01	68,684	81,932			
1967	87,170.70	72,055	87,171			
1968	106,182.60	86,518	106,183			
1969	100,569.52	80,737	100,570			
1970	119,015.61	94,641	119,016			
1971	157,225.92	123,045	157,226			
1972	243,129.36	187,161	243,129			
1973	312,223.35	236,322	312,223			
1974	323,748.88	240,804	323,749			
1975	263,924.80	192,771	263,925			
1976	210,779.07	151,086	208,553	2,226	16.00	139
1977	222,206.14	156,233	215,658	6,548	16.68	393
1978	300,481.30	207,092	285,862	14,619	17.36	842
1979	305,556.35	206,251	284,701	20,855	18.06	1,155
1980	322,676.22	213,160	294,238	28,438	18.75	1,517
1981	358,632.22	231,712	319,846	38,786	19.45	1,994
1982	361,696.11	227,109	313,492	48,204	20.45	2,357
1983	418,841.15	256,750	354,408	64,433	21.15	3,046

PENNSYLVANIA POWER COMPANY

ACCOUNT 369 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R4						
NET SALVAGE PERCENT.. 0						
1984	460,178.39	275,187	379,857	80,321	21.85	3,676
1985	483,846.44	281,986	389,242	94,604	22.55	4,195
1986	673,056.62	379,739	524,177	148,880	23.56	6,319
1987	742,356.99	407,331	562,264	180,093	24.26	7,423
1988	1,109,845.55	591,548	816,550	293,296	24.97	11,746
1989	1,052,574.99	541,234	747,098	305,477	25.98	11,758
1990	1,484,784.39	739,720	1,021,081	463,703	26.69	17,374
1991	932,678.77	447,126	617,195	315,484	27.69	11,393
1992	892,673.89	413,308	570,514	322,160	28.41	11,340
1993	1,055,146.27	468,696	646,970	408,176	29.41	13,879
1994	1,834,090.30	784,074	1,082,305	751,785	30.13	24,951
1995	2,108,192.65	861,197	1,188,763	919,430	31.13	29,535
1996	2,179,863.54	849,057	1,172,005	1,007,859	32.13	31,368
1997	829,008.31	308,723	426,149	402,859	32.86	12,260
1998	239,188.38	84,529	116,681	122,507	33.85	3,619
1999	3,185,519.42	1,064,601	1,469,534	1,715,985	34.86	49,225
2000	134,047.81	42,252	58,323	75,725	35.85	2,112
2001	216,228.41	64,350	88,826	127,402	36.58	3,483
2002	223,758.70	62,294	85,988	137,771	37.58	3,666
2003	478,407.64	124,003	171,169	307,239	38.58	7,964
2004	821,522.44	197,165	272,159	549,363	39.58	13,880
2005	934,858.94	206,417	284,930	649,929	40.58	16,016
2006	1,597,274.56	322,011	444,492	1,152,783	41.58	27,724
2007	965,030.12	176,987	244,306	720,724	42.31	17,034
2008	809,272.57	132,721	183,203	626,070	43.32	14,452
2009	1,020,018.63	147,699	203,878	816,141	44.31	18,419
2010	888,906.58	111,469	153,867	735,040	45.32	16,219
2011	1,239,955.25	131,683	181,770	1,058,185	46.31	22,850
2012	1,083,323.46	94,032	129,798	953,525	47.32	20,151
2013	739,466.27	49,988	69,002	670,464	48.31	13,878
2014	1,170,247.73	56,406	77,861	1,092,387	49.32	22,149
2015	1,042,775.16	30,240	41,742	1,001,033	50.31	19,897
2016	862,260.56	8,364	11,545	850,716	51.05	16,664
	38,808,793.47	14,409,674	19,527,568	19,281,225		518,062

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 37.2 1.33

PENNSYLVANIA POWER COMPANY

ACCOUNT 370.1 METERS - SMART GRID

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 15-S0.5						
NET SALVAGE PERCENT.. 0						
2008	2,124.43	1,165	1,049	1,075	7.00	154
2010	170,669.27	77,757	70,048	100,621	7.77	12,950
2013	439,862.11	123,601	111,346	328,516	8.95	36,706
2014	5,724,882.12	1,206,805	1,087,154	4,637,728	9.36	495,484
2015	21,159,288.73	2,814,185	2,535,169	18,624,120	9.77	1,906,256
2016	8,678,506.63	407,890	367,449	8,311,058	10.13	820,440
	36,175,333.29	4,631,403	4,172,215	32,003,118		3,271,990
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.8						9.04

PENNSYLVANIA POWER COMPANY

ACCOUNT 371 INSTALLATIONS ON CUSTOMERS' PREMISES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 33-R2						
NET SALVAGE PERCENT.. 0						
1985	46,710.65	36,341	41,816	4,895	8.99	544
1986	137,608.86	105,353	121,224	16,385	9.34	1,754
1987	351,217.02	263,167	302,812	48,405	9.87	4,904
1988	198,820.13	146,192	168,215	30,605	10.26	2,983
1989	257,900.73	185,817	213,810	44,091	10.67	4,132
1990	381,535.43	267,914	308,274	73,261	11.24	6,518
1991	431,952.74	296,320	340,960	90,993	11.67	7,797
1992	325,746.63	217,859	250,679	75,068	12.13	6,189
1993	315,393.33	204,564	235,381	80,012	12.73	6,285
1994	58,013.55	36,549	42,055	15,959	13.21	1,208
1995	41,904.60	25,587	29,442	12,463	13.71	909
1996	96,339.56	56,879	65,448	30,892	14.22	2,172
1997	59,152.71	33,563	38,619	20,534	14.87	1,381
1998	65,869.53	35,952	41,368	24,502	15.40	1,591
1999	34,458.97	18,029	20,745	13,714	15.95	860
2000	41,670.97	20,835	23,974	17,697	16.50	1,073
2001	19,361.16	9,243	10,635	8,726	16.97	514
2002	24,464.01	11,068	12,735	11,729	17.55	668
2003	48,692.20	20,772	23,901	24,791	18.15	1,366
2004	75,572.36	30,320	34,888	40,684	18.65	2,181
2005	84,701.41	31,661	36,431	48,270	19.27	2,505
2006	122,670.44	42,505	48,908	73,762	19.80	3,725
2007	48,817.26	15,534	17,874	30,943	20.35	1,521
2008	52,253.51	15,101	17,376	34,878	20.91	1,668
2009	35,007.31	9,084	10,452	24,555	21.40	1,147
2010	82,292.82	18,829	21,666	60,627	21.91	2,767
2011	103,461.02	20,423	23,499	79,962	22.36	3,576
2012	69,340.79	11,455	13,181	56,160	22.75	2,469
2013	85,624.63	11,268	12,965	72,660	23.10	3,145
2014	41,195.48	3,996	4,598	36,597	23.27	1,573
2015	54,987.78	3,343	3,847	51,141	23.19	2,205
	3,792,737.59	2,205,523	2,537,778	1,254,960		81,330

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 15.4 2.14

PENNSYLVANIA POWER COMPANY

ACCOUNT 373.1 STREET LIGHTING AND SIGNAL SYSTEMS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 27-R2						
NET SALVAGE PERCENT.. 0						
1927	1,962.37	1,962	1,962			
1928	3,250.05	3,250	3,250			
1929	593.60	594	594			
1930	1,948.13	1,948	1,948			
1931	1,042.49	1,042	1,042			
1935	126.28	126	126			
1937	1,719.27	1,719	1,719			
1939	348.13	348	348			
1940	824.80	825	825			
1948	3,270.60	3,271	3,271			
1953	783.01	783	783			
1954	4,311.29	4,311	4,311			
1955	1,121.92	1,122	1,122			
1958	955.99	956	956			
1959	24.09	24	24			
1960	362.95	363	363			
1961	2,109.04	2,109	2,109			
1962	4,541.95	4,542	4,542			
1963	5,503.74	5,504	5,504			
1964	8,246.19	8,246	8,246			
1965	20,753.36	20,753	20,753			
1966	21,451.98	21,452	21,452			
1967	41,354.84	41,351	41,355			
1968	2,895.01	2,878	2,895			
1969	4,214.10	4,164	4,214			
1970	60,853.53	59,709	60,854			
1971	18,778.21	18,284	18,778			
1972	7,954.76	7,717	7,955			
1973	4,564.49	4,388	4,564			
1974	34,829.76	33,304	34,830			
1975	55,882.76	52,876	55,883			
1976	11,325.30	10,641	11,325			
1977	12,592.56	11,739	12,593			
1978	6,929.20	6,403	6,918	11	3.17	3
1979	62,599.32	57,516	62,143	456	3.31	138
1980	40,219.95	36,552	39,492	728	3.66	199
1981	4,883.15	4,403	4,757	126	3.87	33
1982	44,850.69	39,922	43,134	1,717	4.26	403
1983	12,428.73	10,950	11,831	598	4.52	132
1984	45,077.91	39,263	42,422	2,656	4.81	552
1985	107,762.95	92,676	100,131	7,632	5.13	1,488
1986	56,577.18	47,972	51,831	4,746	5.47	868

PENNSYLVANIA POWER COMPANY

ACCOUNT 373.1 STREET LIGHTING AND SIGNAL SYSTEMS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 27-R2						
NET SALVAGE PERCENT.. 0						
1987	69,992.28	58,430	63,130	6,862	5.84	1,175
1988	29,098.87	23,884	25,805	3,294	6.22	530
1989	209,771.80	169,034	182,632	27,140	6.63	4,094
1990	369,542.41	292,825	316,382	53,160	6.94	7,660
1991	408,856.47	316,946	342,443	66,413	7.39	8,987
1992	381,311.37	288,653	311,874	69,437	7.86	8,834
1993	395,760.42	292,032	315,525	80,235	8.35	9,609
1994	302,891.10	218,082	235,626	67,265	8.75	7,687
1995	216,175.14	151,063	163,215	52,960	9.27	5,713
1996	183,949.74	124,828	134,870	49,080	9.71	5,055
1997	123,115.89	80,666	87,155	35,961	10.26	3,505
1998	107,991.21	68,326	73,823	34,168	10.74	3,181
1999	57,519.15	34,926	37,736	19,783	11.32	1,748
2000	53,648.52	31,245	33,758	19,891	11.83	1,681
2001	168,652.20	93,838	101,387	67,265	12.36	5,442
2002	91,873.08	48,619	52,530	39,343	12.90	3,050
2003	315,180.68	157,842	170,540	144,641	13.46	10,746
2004	233,127.71	109,850	118,687	114,441	14.03	8,157
2005	304,225.75	133,981	144,759	159,467	14.61	10,915
2006	276,656.62	113,291	122,405	154,252	15.14	10,188
2007	177,149.50	66,821	72,196	104,954	15.69	6,689
2008	149,047.00	51,183	55,300	93,747	16.25	5,769
2009	159,197.14	49,192	53,149	106,048	16.77	6,324
2010	366,135.00	99,955	107,996	258,139	17.31	14,913
2011	654,968.56	154,573	167,008	487,961	17.81	27,398
2012	225,072.77	44,474	48,052	177,021	18.28	9,684
2013	305,600.25	48,224	52,103	253,497	18.67	13,578
2014	332,007.74	38,579	41,682	290,326	19.01	15,272
2015	217,981.26	15,913	17,193	200,788	19.03	10,551
2016	82,357.86	2,207	2,385	79,973	18.16	4,404
	7,690,683.12	4,047,440	4,354,501	3,336,182		236,355

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 14.1 3.07

PENNSYLVANIA POWER COMPANY

ACCOUNT 373.2 STREET LIGHTING AND SIGNAL SYSTEM - ESIP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 27-R2						
NET SALVAGE PERCENT.. 0						
2007	2,923.22	1,103	2,923			
2009	3,092.00	955	2,607	485	16.77	29
2011	582.10	137	374	208	17.81	12
2012	1,646.55	325	887	760	18.28	42
2013	6,982.43	1,102	3,009	3,973	18.67	213
2014	4,477.95	520	1,420	3,058	19.01	161
2015	5,295.45	387	1,056	4,239	19.03	223
	24,999.70	4,529	12,276	12,724		680

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.7 2.72

PENNSYLVANIA POWER COMPANY

ACCOUNT 390.1 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R2.5						
NET SALVAGE PERCENT.. 0						
1949	523.13	480	515	8	6.03	1
1950	462.45	424	455	7	5.96	1
1951	98,541.40	89,712	96,274	2,267	6.45	351
1952	3,977.50	3,617	3,882	96	6.43	15
1953	3,997.40	3,604	3,868	129	6.92	19
1954	345.37	311	334	11	6.94	2
1956	194,481.77	172,972	185,625	8,857	7.52	1,178
1957	345.75	307	329	17	7.61	2
1958	1,826.85	1,603	1,720	107	8.17	13
1959	385.49	337	362	23	8.29	3
1960	616,048.25	536,024	575,234	40,814	8.44	4,836
1961	819.67	705	757	63	9.02	7
1962	10,401.13	8,899	9,550	851	9.20	92
1963	18,291.51	15,462	16,593	1,699	9.79	174
1964	19,367.21	16,268	17,458	1,909	10.00	191
1965	12,307.94	10,269	11,020	1,288	10.23	126
1966	20,989.12	17,278	18,542	2,447	10.85	226
1967	6,177.34	5,046	5,415	762	11.10	69
1969	129,592.08	103,414	110,979	18,613	12.02	1,549
1970	1,710.72	1,352	1,451	260	12.32	21
1972	1,703.21	1,311	1,407	296	13.31	22
1973	1,575.69	1,199	1,287	289	13.65	21
1974	15,850.68	11,856	12,723	3,128	14.32	218
1975	10,280.25	7,594	8,149	2,131	14.68	145
1976	1,736.64	1,259	1,351	386	15.36	25
1977	5,158.74	3,688	3,958	1,201	15.75	76
1978	4,256.33	2,982	3,200	1,056	16.45	64
1979	5,510.00	3,802	4,080	1,430	16.85	85
1980	484,146.92	326,896	350,808	133,339	17.56	7,593
1981	3,620.69	2,403	2,579	1,042	17.98	58
1982	43,482.78	28,203	30,266	13,217	18.69	707
1984	41,615.34	25,835	27,725	13,890	19.85	700
1985	41,691.16	25,348	27,202	14,489	20.31	713
1986	8,125.55	4,808	5,160	2,966	21.05	141
1987	28,031.35	16,208	17,394	10,637	21.52	494
1988	7,858.44	4,412	4,735	3,123	22.26	140
1989	1,130.15	618	663	467	22.75	21
1990	32,637.69	17,298	18,563	14,075	23.50	599
1991	70,980.15	36,562	39,236	31,744	24.00	1,323
1992	700,036.39	348,198	373,668	326,368	24.76	13,181
1993	430,194.38	207,268	222,429	207,765	25.28	8,219
1994	10,544.91	4,888	5,246	5,299	26.04	203

PENNSYLVANIA POWER COMPANY

ACCOUNT 390.1 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R2.5						
NET SALVAGE PERCENT.. 0						
1995	211,474.72	94,571	101,489	109,986	26.58	4,138
2000	6,349.27	2,253	2,418	3,931	30.01	131
2003	1,303,677.95	387,192	415,514	888,164	31.95	27,799
2005	185,154.07	47,696	51,185	133,969	33.14	4,043
2006	148,535.99	35,248	37,826	110,710	33.75	3,280
2008	209,326.92	40,735	43,715	165,612	35.17	4,709
2010	78,275.08	11,906	12,777	65,498	36.24	1,807
2011	23,677.87	3,073	3,298	20,380	36.87	553
2012	18,280.57	1,967	2,111	16,170	37.34	433
2013	190,879.79	16,225	17,412	173,468	37.65	4,607
2014	81,934.78	5,064	5,434	76,501	37.98	2,014
2015	1,026.98	39	42	985	37.87	26
2016	602,889.88	8,079	8,670	594,220	36.68	16,200
	6,152,243.39	2,724,768	2,924,083	3,228,160		113,364
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						28.5 1.84

PENNSYLVANIA POWER COMPANY

ACCOUNT 390.2 STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R2.5						
NET SALVAGE PERCENT.. 0						
2008	41,239.11	8,025	8,680	32,559	35.17	926
2015	60.04	2	2	58	37.87	2
	41,299.15	8,027	8,682	32,617		928
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						35.1 2.25

PENNSYLVANIA POWER COMPANY

ACCOUNT 391.1 OFFICE FURNITURE AND EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
1994	62,756.72	62,757	62,757			
1995	20,754.41	20,754	20,754			
1996	65,039.07	65,039	65,039			
1997	95,057.15	92,681	64,593	30,464	0.50	30,464
1998	110,169.27	101,907	71,022	39,147	1.50	26,098
1999	15,464.75	13,532	9,431	6,034	2.50	2,414
2000	6,286.28	5,186	3,614	2,672	3.50	763
2001	2,584.00	2,003	1,396	1,188	4.50	264
2002	214.61	156	109	106	5.50	19
2004	9,120.21	5,700	3,973	5,147	7.50	686
2008	3,008.83	1,279	891	2,118	11.50	184
2009	1,198.60	449	313	886	12.50	71
2015	6.54			7	18.50	
	391,660.44	371,443	303,892	87,768		60,963
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 1.4						15.57

PENNSYLVANIA POWER COMPANY

ACCOUNT 391.2 DATA PROCESSING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 5-SQUARE						
NET SALVAGE PERCENT.. 0						
2011	809,980.50	809,980	809,980			
2012	424.10	382	149	275	0.50	275
2013	38,837.53	27,186	10,616	28,222	1.50	18,815
2014	195,790.30	97,895	38,229	157,561	2.50	63,024
2015	112,354.88	33,706	13,163	99,192	3.50	28,341
	1,157,387.31	969,149	872,137	285,250		110,455
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						2.6 9.54

PENNSYLVANIA POWER COMPANY

ACCOUNT 391.25 DATA PROCESSING EQUIPMENT - SMART GRID

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 5-SQUARE						
NET SALVAGE PERCENT.. 0						
2013	5,570.72	3,900	4,173	1,398	1.50	932
2014	472,801.24	236,401	252,922	219,879	2.50	87,952
2015	2,004,244.56	601,273	643,294	1,360,951	3.50	388,843
2016	685,318.99	68,532	73,321	611,998	4.50	136,000
	3,167,935.51	910,106	973,710	2,194,226		613,727
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						3.6 19.37

PENNSYLVANIA POWER COMPANY

ACCOUNT 392 TRANSPORTATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 10-L2						
NET SALVAGE PERCENT.. 0						
1963	1,534.08	1,534	1,534			
1971	1,311.61	1,312	1,312			
1977	4,867.15	4,867	4,867			
1980	9,527.95	9,528	9,528			
1981	6,200.00	6,200	6,200			
1983	14,623.92	14,624	14,624			
1994	13,412.00	12,886	11,576	1,836	0.92	1,836
1996	3,827.00	3,593	3,228	599	1.33	450
2010	194,531.10	121,640	109,274	85,257	3.90	21,861
2015	345,042.91	63,833	57,344	287,699	6.61	43,525
	594,877.72	240,017	219,487	375,391		67,672

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.5 11.38

PENNSYLVANIA POWER COMPANY

ACCOUNT 393 STORES EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 30-SQUARE						
NET SALVAGE PERCENT.. 0						
1982	18,230.62	18,231	18,231			
1983	1,479.39	1,479	1,479			
1984	508.35	508	508			
1985	2,547.26	2,547	2,547			
1986	183.57	184	184			
1987	453.64	446	254	200	0.50	200
1990	18,188.12	16,066	9,135	9,053	3.50	2,587
1991	56,017.99	47,615	27,072	28,946	4.50	6,432
1996	26,718.30	18,257	10,380	16,338	9.50	1,720
	124,327.24	105,333	69,790	54,537		10,939
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.0						8.80

PENNSYLVANIA POWER COMPANY

ACCOUNT 394 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
1986	53,556.71	53,557	53,557			
1987	48,988.99	48,989	48,989			
1988	12,040.98	12,041	12,041			
1989	53,620.48	53,620	53,620			
1990	31,909.11	31,909	31,909			
1991	73,809.21	73,809	73,809			
1992	83,006.33	81,346	31,383	51,623	0.50	51,623
1993	87,471.47	82,223	31,721	55,750	1.50	37,167
1994	38,655.26	34,790	13,422	25,233	2.50	10,093
1995	3,488.60	3,000	1,157	2,332	3.50	666
1996	18,168.72	14,898	5,748	12,421	4.50	2,760
1997	11,246.67	8,772	3,384	7,863	5.50	1,430
1998	58,850.59	43,549	16,801	42,050	6.50	6,469
1999	51,776.59	36,244	13,983	37,794	7.50	5,039
2005	296,211.09	136,257	52,567	243,644	13.50	18,048
2008	168,668.95	57,347	22,124	146,545	16.50	8,882
2009	79.57	24	9	71	17.50	4
2010	55,280.89	14,373	5,545	49,736	18.50	2,688
2011	7,431.35	1,635	631	6,800	19.50	349
2012	310,233.29	55,842	21,544	288,689	20.50	14,082
2013	385,593.78	53,983	20,827	364,767	21.50	16,966
2014	83,281.45	8,328	3,213	80,068	22.50	3,559
2015	24,598.40	1,476	569	24,029	23.50	1,023
	1,957,968.48	908,012	518,553	1,439,415		180,848

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 8.0 9.24

PENNSYLVANIA POWER COMPANY

ACCOUNT 395 LABORATORY EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
1995	3,641.33	3,641	3,641			
1996	4,361.85	4,362	4,362			
2008	21,537.11	9,153	4,582	16,955	11.50	1,474
2009	1.82	1	1	1	12.50	
2015	31.95	2	1	31	18.50	2
	29,574.06	17,159	12,587	16,987		1,476
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					11.5	4.99

PENNSYLVANIA POWER COMPANY

ACCOUNT 396 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 18-S1.5						
NET SALVAGE PERCENT.. 0						
1992	3,620.00	3,246	3,277	343	2.82	122
2008	236,313.10	117,306	118,425	117,888	8.62	13,676
2009	126,250.06	56,623	57,163	69,087	9.22	7,493
2010	94,187.12	37,524	37,881	56,306	9.81	5,740
2015	665.05	66	67	598	13.56	44
	461,035.33	214,765	216,813	244,222		27,075
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.0						5.87

PENNSYLVANIA POWER COMPANY

ACCOUNT 397 COMMUNICATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
1996	5,474.34	5,474	5,474			
1999	16,952.63	16,953	16,953			
2001	105,044.68	105,045	105,045			
2002	31,986.37	30,920	2,323	29,663	0.50	29,663
2006	1,912.24	1,339	101	1,811	4.50	402
2008	116,125.35	65,805	4,944	111,181	6.50	17,105
2009	251,569.31	125,785	9,451	242,118	7.50	32,282
2010	99,246.05	43,006	3,231	96,015	8.50	11,296
2011	78.52	29	2	77	9.50	8
2012	8,288.02	2,486	187	8,101	10.50	772
2013	927,172.55	216,337	16,256	910,917	11.50	79,210
2014	5,086.63	848	64	5,023	12.50	402
2015	273,198.59	27,320	2,052	271,147	13.50	20,085
2016	281,826.95	9,393	706	281,121	14.50	19,388
	2,123,962.23	650,740	166,789	1,957,173		210,613
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						9.3 9.92

PENNSYLVANIA POWER COMPANY

ACCOUNT 398 MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
1996	26,160.03	26,160	26,160			
2011	7,594.65	2,089	829-	8,424	14.50	581
2015	11.30	1		11	18.50	1
	33,765.98	28,250	25,331	8,435		582

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 14.5 1.72

**PART VIII. EXPERIENCED AND ESTIMATED
NET SALVAGE**

PENNSYLVANIA POWER COMPANY

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2012 TRANSACTION YEAR				
355.00	1,857.13	35,861.06		35,861.06-
356.10	1,189.02	11,667.87		11,667.87-
362.00	21,497.49			
364.00	128,295.58	468,356.42		468,356.42-
365.00	722,902.40	519,867.34		519,867.34-
366.00	477.30			
367.00	31,803.40	15,595.25		15,595.25-
368.00	1,031,925.10	185,933.76		185,933.76-
369.00	5,028.77	140,833.72		140,833.72-
371.00	25,663.28	12,634.18		12,634.18-
373.10	248,005.97	69,812.69		69,812.69-
373.20	18,890.99	12,718.49		12,718.49-
391.20	86,637.54			
392.00	82,066.61			
	2,406,240.58	1,473,280.78		1,473,280.78-
2013 TRANSACTION YEAR				
353.00	22,778.02	48,560.22		48,560.22-
355.00	17,762.85	3,252.85		3,252.85-
356.10	10,857.43	51.28		51.28-
362.00	378,579.47	520,665.89		520,665.89-
364.00	156,324.53	1,092,276.41	167.86	1,092,108.55-
365.00	965,517.67	1,227,445.37	80.32	1,227,365.05-
366.00	594.81	439.41		439.41-
367.00	278,037.65	408,750.48		408,750.48-
368.00	1,307,344.41	510,189.38		510,189.38-
369.00	18,254.94	149,726.71		149,726.71-
370.10	4,699.69	3,513.53		3,513.53-
371.00	58,293.63	17,617.70		17,617.70-
373.10	115,582.21	62,686.99		62,686.99-
373.20	51,905.75	23,946.56		23,946.56-
391.20	388,643.50	27,891.33		27,891.33-
	3,775,176.56	4,097,014.11	248.18	4,096,765.93-

PENNSYLVANIA POWER COMPANY

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2014 TRANSACTION YEAR				
352.10	190.25	1,549.65		1,549.65-
353.00	28,798.62	844.17		844.17-
355.00	308.11	22,084.12		22,084.12-
356.10		12,111.73		12,111.73-
362.00	538,426.00	166,530.97		166,530.97-
364.00	159,354.52	467,581.73	1,482.81	466,098.92-
365.00	1,370,126.05	970,948.36	31.81	970,916.55-
366.00	3,105.45	1,082.54		1,082.54-
367.00	176,190.79	187,384.00		187,384.00-
368.00	1,890,948.38	323,360.85		323,360.85-
369.00	13,365.68	97,706.45	1.41	97,705.04-
371.00	28,520.72	9,162.55		9,162.55-
373.10	105,153.54	35,346.79	233.82	35,112.97-
373.20	4,870.14	453.42		453.42-
390.10	12,177.50	13,712.56		13,712.56-
391.20	424,309.21			
	4,755,844.96	2,309,859.89	1,749.85	2,308,110.04-
2015 TRANSACTION YEAR				
352.10	1,591.55			
353.00	68,336.93			
355.00	970.26	2,167.61		2,167.61-
356.10		2,948.95		2,948.95-
362.00	421,926.04	1,316.45		1,316.45-
364.00	254,503.80	572,486.14		572,486.14-
365.00	1,030,532.87	686,375.24		686,375.24-
366.00	53.72	56.38		56.38-
367.00	83,335.52	40,435.35		40,435.35-
368.00	1,483,782.19	285,595.58		285,595.58-
369.00	259.05-	103,281.74		103,281.74-
370.10	109,977.39	6.31-		6.31-
371.00	16,266.49	3,474.90		3,474.90-
373.10	115,314.15	75,696.03		75,696.03-
373.20	3,431.54			
391.20	399,131.13			
392.00	50,943.00		5,309.70	5,309.70
	4,039,837.53	1,773,828.06	5,309.70	1,768,518.36-

PENNSYLVANIA POWER COMPANY

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2016 TRANSACTION YEAR				
355.00	15,820.39	44,772.00		44,772.00-
362.00	196,654.31	98,327.00		98,327.00-
364.00	870,420.50	2,176,051.00	8,704.00	2,167,347.00-
365.00	1,226,872.05	1,006,035.00		1,006,035.00-
366.00	6,587.54	2,240.00		2,240.00-
367.00	479,172.74	531,882.00		531,882.00-
368.00	545,118.28	98,121.00		98,121.00-
369.00	86,226.06	172,452.00		172,452.00-
373.10	8,235.79	2,635.00		2,635.00-
390.10	60,288.99	6,029.00		6,029.00-
	3,495,396.65	4,138,544.00	8,704.00	4,129,840.00-
TOTAL	18,472,496.28	13,792,526.84	16,011.73	13,776,515.11-

PENNSYLVANIA POWER COMPANY

READING, PENNSYLVANIA

2017 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION
ACCRUALS RELATED TO ELECTRIC PLANT
AS OF DECEMBER 31, 2017

Prepared by:



Gannett Fleming

*Excellence Delivered **As Promised***

PENNSYLVANIA POWER COMPANY
Reading, Pennsylvania

2017 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO ELECTRIC PLANT
AS OF DECEMBER 31, 2017

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC
Camp Hill, Pennsylvania



*Excellence Delivered **As Promised***

April 8, 2016

Pennsylvania Power Company
2800 Pottsville Pike
Reading, PA 19605-2459

Attention Mr. Charles V. Fullem
Director, Rates & Regulatory Affairs - PA

Ladies and Gentlemen:

Pursuant to your request, we have determined the annual depreciation accruals applicable to electric plant as of December 31, 2017. The results of our study as of December 31, 2016 are presented in our report titled "2016 Depreciation Study - Calculated Annual Depreciation Accruals Related to Electric Plant as of December 31, 2016". The same methods, procedures and estimates are used in both studies.

The attached report sets forth a description of the methods and procedures upon which the studies were based, the estimates of survivor curves and the calculated annual depreciation rates at December 31, 2017.

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

A handwritten signature in black ink that reads "John J. Spanos".

JOHN J. SPANOS
Sr. Vice President

JJS:krm

061041.003

Gannett Fleming Valuation and Rate Consultants, LLC

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PART I. RESULTS OF STUDY

**PENNSYLVANIA POWER COMPANY
DEPRECIATION STUDY**

PART I. RESULTS OF STUDY

DESCRIPTION OF SUMMARY TABULATIONS

Tables 1 through 4 presented on pages I-3 through I-8 summarize the results of the depreciation study as of December 31, 2017. Table 1 sets forth, by depreciable group, the estimated survivor curve, original cost, book depreciation reserve as of December 31, 2017, future book accruals, calculated annual accrual amount and rate, and composite remaining life for plant in service. Table 2 presents the bringforward of the book reserve to December 31, 2017. Table 3 sets forth the calculations of the depreciation accruals for the twelve months ended December 31, 2017. Table 4 presents the annual amortization of experienced and estimated net salvage based on the period 2013 through 2017.

DESCRIPTION OF DETAILED TABULATIONS

The supporting data for the depreciation calculations are presented in account sequence in the section beginning on page II-6. The original cost, calculated accrued depreciation, allocated book reserve, future accruals, remaining life and annual accrual are shown for each vintage of each account or subaccount. The amounts of regular retirements, gross salvage and cost of removal are set forth by account for the years 2013 through 2017, beginning on pages III-2 through III-4.

PENNSYLVANIA POWER COMPANY

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO ELECTRIC PLANT AS OF DECEMBER 31, 2017

	ACCOUNT (1)	SURVIVOR CURVE (2)	ORIGINAL COST (3)	BOOK DEPRECIATION RESERVE (4)	FUTURE ACCRUALS (5)	CALCULATED ANNUAL ACCRUAL AMOUNT (6)	ANNUAL ACCRAU RATE (7)=(6)/(3)	COMPOSITE REMAINING LIFE (8)=(5)/(6)
	ELECTRIC PLANT							
	INTANGIBLE PLANT							
303	MISCELLANEOUS INTANGIBLE PLANT	7-SQ	12,759,670.45	10,295,643	2,504,027	669,453	5.23	3.7
303.1	MISCELLANEOUS INTANGIBLE PLANT - SMART METER SOFTWARE	7-SQ	6,093,518.89	1,445,197	4,538,322	893,784	14.53	5.2
	TOTAL INTANGIBLE PLANT		18,853,189.34	11,740,840	7,142,349	1,563,237	8.23	
	TRANSMISSION PLANT							
352.1	STRUCTURES AND IMPROVEMENTS	65-R4	764,597.96	534,697	229,901	6,110	0.60	37.6
352.2	STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	65-R4	195,215.93	107,676	87,540	2,652	1.35	33.3
353	STATION EQUIPMENT	58-R2	6,417,733.78	4,752,220	1,665,514	51,392	0.80	32.4
354	TOWERS AND FIXTURES	70-R4	7,576.09	7,534	42	4	0.05	10.5
355	POLES AND FIXTURES	62-R1.5	2,825,552.87	966,727	1,858,826	50,072	1.77	37.1
356	OVERHEAD CONDUCTORS AND DEVICES	62-R2	2,722,010.42	1,097,646	1,714,364	42,676	1.57	40.2
357	UNDERGROUND CONDUIT	45-S2.5	64,653.66	55,751	8,903	948	1.47	9.4
358	UNDERGROUND CONDUCTORS AND DEVICES	40-S1.5	36,071.32	30,368	5,703	565	1.57	10.1
359	ROADS AND TRAILS	55-S2.5	6,324.44	5,196	1,128	74	1.17	15.2
	TOTAL TRANSMISSION PLANT		13,039,736.67	7,467,615	5,571,921	154,473	1.18	
	DISTRIBUTION PLANT							
361.1	STRUCTURES AND IMPROVEMENTS	65-R3	1,345,102.62	565,931	777,172	17,545	1.31	44.3
361.2	STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	65-R3	448,648.71	206,312	240,337	6,138	1.37	39.2
362	STATION EQUIPMENT	50-R0.5	57,024,272.35	15,342,464	41,681,808	1,576,262	2.76	26.4
364	POLES, TOWERS AND FIXTURES	55-R2	120,274,049.69	32,651,158	87,622,892	2,699,237	2.24	32.5
365	OVERHEAD CONDUCTORS AND DEVICES	60-R1	129,163,441.64	25,268,796	103,894,646	3,095,204	2.40	33.6
365.1	OVERHEAD CONDUCTORS AND DEVICES - CLEARING AND GRADING	60-R1	48,691,447.12	7,186,798	41,404,649	1,130,442	2.33	36.6
366	UNDERGROUND CONDUIT	7,699,285.67	2,534,621	5,164,465	142,691	1.85	36.2	
367	UNDERGROUND CONDUCTORS AND DEVICES	50-R2.5	70,996,721.16	21,451,209	49,545,512	1,564,288	2.23	31.3
368	LINE TRANSFORMERS	44-R1.5	112,738,193.23	36,761,594	76,976,589	2,998,873	2.66	25.3
369	SERVICES	55-R4	39,459,842.30	19,993,937	19,465,905	532,469	1.35	36.6
370.1	METERS - SMART GRID	15-S0.5	38,703,671.46	7,557,456	31,146,415	3,298,651	8.53	9.4
371	INSTALLATIONS ON CUSTOMERS' PREMISES	33-R2	3,793,737.59	2,627,521	1,165,217	77,486	2.04	15.0
373.1	STREET LIGHTING AND SIGNAL SYSTEMS	27-R2	7,756,101.28	4,630,185	3,125,916	223,650	2.88	14.0
373.2	STREET LIGHTING AND SIGNAL SYSTEMS - ESIP	27-R2	24,999.70	20,390	4,620	246	0.98	16.9
	TOTAL DISTRIBUTION PLANT		638,016,704.72	176,770,462	461,246,243	17,364,362	2.72	

PENNSYLVANIA POWER COMPANY

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO ELECTRIC PLANT AS OF DECEMBER 31, 2017

	ACCOUNT (1)	SURVIVOR CURVE (2)	ORIGINAL COST (3)	BOOK DEPRECIATION RESERVE (4)	FUTURE ACCRUALS (5)	CALCULATED ANNUAL ACCRUAL AMOUNT (6)	ANNUAL ACCRUAL RATE (7)=(6)/(3)	COMPOSITE REMAINING LIFE (8)=(5)/(6)
	GENERAL PLANT							
390.1	STRUCTURES AND IMPROVEMENTS	50-R2.5	6,152,545.31	3,041,198	3,111,347	110,380	1.79	28.2
390.2	STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	50-R2.5	41,299.15	9,611	31,688	916	2.22	34.6
391.1	OFFICE FURNITURE AND EQUIPMENT	20-SQ	148,053.09	102,302	45,751	35,676	24.10	1.3
391.2	DATA PROCESSING EQUIPMENT	5-SQ	346,862.71	139,068	207,915	123,623	35.63	1.7
391.25	DATA PROCESSING EQUIPMENT - SMART GRID	5-SQ	3,372,006.76	1,607,103	1,764,904	654,880	18.42	2.7
392	TRANSPORTATION EQUIPMENT	10-L2	594,877.72	266,132	308,756	59,740	10.04	5.2
393	STORES EQUIPMENT	30-SQ	100,924.41	55,298	44,626	11,206	11.10	4.0
394	TOOLS, SHOP AND GARAGE EQUIPMENT	25-SQ	1,601,056.67	326,047	1,274,990	136,076	8.50	9.4
395	LABORATORY EQUIPMENT	20-SQ	21,570.88	5,860	15,711	1,495	6.93	10.5
396	POWER OPERATED EQUIPMENT	18-ST.5	461,035.33	243,876	217,159	25,612	5.56	8.5
397	COMMUNICATION EQUIPMENT	15-SQ	2,101,683.26	216,923	1,884,760	189,400	9.01	10.0
398	MISCELLANEOUS EQUIPMENT	20-SQ	7,505.95	1,026	6,580	488	6.42	13.5
	TOTAL GENERAL PLANT		14,949,621.24	6,035,434	8,914,187	1,349,492	9.03	
	TOTAL DEPRECIABLE PLANT		684,889,251.97	202,014,551	482,874,700	20,441,584	2.98	
	NONDEPRECIABLE							
301	ORGANIZATION		22,853.53					
302	FRANCHISES AND CONSENTS		68,655.97					
350.1	LAND		2,089,804.27	772				
350.2	EASEMENTS		8,430,107.46					
360.1	LAND		578,458.76					
360.2	EASEMENTS		5,802,870.46					
374	DISTRIBUTION PLANT ARO		4,407.74	2,352				
389.1	LAND		226,639.25					
389.2	EASEMENTS		310.93					
399.1	GENERAL PLANT ARO		32,875.91	21,479				
	TOTAL NONDEPRECIABLE PLANT		17,255,971.38	24,603				
	TOTAL ELECTRIC PLANT		702,146,223.35	202,039,154	482,874,700	20,441,584		

* Indicates the use of an interim survivor curve and December 2020 retirement date.

PENNSYLVANIA POWER COMPANY

TABLE 2. BRINGFORWARD TO DECEMBER 31, 2017, OF THE BOOK RESERVE AS OF DECEMBER 31, 2016

ACCOUNT (1)	BOOK RESERVE AS OF DECEMBER 31, 2016 (2)	DEPRECIATION ACCRUALS (3)	AMORTIZATION OF NET SALVAGE (4)	PROJECTED RETIREMENTS (5)	PROJECTED GROSS SALVAGE (6)	PROJECTED COST OF REMOVAL (7)	ACQUISITIONS (8)	ADJUSTMENTS (9)	RESERVE AT END OF PERIOD (10)	BOOK RESERVE AS A PERCENT OF ORIGINAL COST (11)
DEPRECIABLE PLANT										
303.00	9,647,740	647,903							10,295,643	80.44
303.10	698,001	747,196							1,445,197	23.76
352.10	528,270	6,117	310						534,697	69.93
352.20	105,041	2,635							107,676	55.16
353.00	4,689,714	52,625	9,881						4,752,220	74.05
354.00	7,529	5							7,534	99.44
355.00	892,544	52,555	21,628						966,727	34.21
356.00	958,466	43,824	5,356						1,007,646	37.02
357.00	54,742	1,009							55,751	86.23
358.00	29,751	617							30,368	84.19
359.00	5,119	77							5,196	82.16
361.10	554,152	16,897		5,118					565,931	42.14
361.20	202,121	6,191							208,312	46.43
362.00	14,463,798	1,478,711	157,368	501,598	10,499	255,815			15,342,464	26.91
364.00	32,854,720	2,507,421	953,279	1,049,932		2,624,829			32,651,158	27.15
365.00	24,137,780	2,883,118	882,112	1,439,461		1,194,753			25,288,796	19.56
365.10	6,001,167	1,185,631							7,186,798	14.78
366.00	2,398,624	143,475	764	5,957		2,085			2,534,821	32.92
367.00	20,835,527	1,509,383	236,809	530,756		599,754			21,451,289	30.21
368.00	34,173,620	2,967,186	280,640	540,862		118,990			36,761,594	32.61
369.00	19,527,568	520,486	132,800	72,339		144,678			19,953,837	50.59
370.10	4,172,215	3,384,540	701						7,557,456	19.53
371.00	2,537,778	81,165	8,578						2,627,521	69.28
373.10	4,354,501	237,108	49,189	7,269		3,344			4,630,185	59.70
373.20	12,276	680	7,424						20,380	81.52
390.10	2,924,083	113,204	3,948	34					3,041,198	67.54
390.20	8,682	929					3		9,611	67.54
391.10	303,892	42,017		243,607					102,302	69.10
391.20	872,137	71,758	5,578	810,405					139,068	40.08
391.25	973,710	633,393	(1,062)						1,607,103	47.66
392.00	219,487	67,697							286,122	48.10
393.00	69,790	9,911		23,403					56,298	55.78
394.00	518,553	164,426		356,932					326,047	20.36
395.00	12,587	1,276		8,003					5,860	27.17
396.00	216,813	27,063		159,458					243,876	52.90
397.00	166,789	209,592		26,160					216,923	10.32
398.00	25,331	1,855							1,026	13.49
TOTAL DEPRECIABLE PLANT	190,154,618	19,619,676	2,755,303	5,781,293	10,499	4,944,251	0	0	202,014,551	

PENNSYLVANIA POWER COMPANY

TABLE 2. BRINGS FORWARD TO DECEMBER 31, 2017, OF THE BOOK RESERVE AS OF DECEMBER 31, 2016

ACCOUNT (1)	BOOK RESERVE AS OF DECEMBER 31, 2016 (2)	DEPRECIATION ACCRUALS (3)	AMORTIZATION OF NET SALVAGE (4)	PROJECTED RETIREMENTS (5)	PROJECTED GROSS SALVAGE (6)	PROJECTED COST OF REMOVAL (7)	ACQUISITIONS (8)	ADJUSTMENTS (9)	RESERVE AT END OF PERIOD (10)	BOOK RESERVE AS A PERCENT OF ORIGINAL COST (11)
NONDEPRECIABLE PLANT										
302.00	772								772	1.12
374.00	2,352								2,352	53.36
398.10	21,479								21,479	65.34
TOTAL NONDEPRECIABLE P	24,603	0	0	0	0	0	0	0	24,603	
TOTAL	190,179,221	19,819,676	2,755,303	5,781,283	10,499	4,944,251	0	0	202,039,154	

PENNSYLVANIA POWER COMPANY

TABLE 3. CALCULATION OF DEPRECIATION ACCRUALS FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017

DEPRECIABLE GROUP		ORIGINAL COST AS OF DECEMBER 31, 2016	ORIGINAL COST AS OF DECEMBER 31, 2017	COMPOSITE ACCRUAL RATE	ANNUAL ACCRUAL AMOUNT
(1)		(2)	(3)	(4)	(5)
DEPRECIABLE PLANT					
INTANGIBLE PLANT					
303	MISCELLANEOUS INTANGIBLE PLANT	12,119,673	12,799,670	5.20	647,903
303.1	MISCELLANEOUS INTANGIBLE PLANT - SMART METER SOFTWARE	4,089,337	6,083,519	14.69	747,196
TOTAL INTANGIBLE PLANT		16,209,010	18,883,189	7.59	1,395,099
TRANSMISSION PLANT					
352.1	STRUCTURES AND IMPROVEMENTS	764,598	764,598	0.80	6,117
352.2	STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	195,216	195,216	1.35	2,635
353	STATION EQUIPMENT	6,417,734	6,417,734	0.82	52,625
354	TOWERS AND FIXTURES	7,576	7,576	0.07	5
355	POLES AND FIXTURES	2,825,553	2,825,553	1.86	52,555
356	OVERHEAD CONDUCTORS AND DEVICES	2,722,010	2,722,010	1.61	43,824
357	UNDERGROUND CONDUIT	64,654	64,654	1.56	1,009
358	UNDERGROUND CONDUCTORS AND DEVICES	36,071	36,071	1.71	617
359	ROADS AND TRAILS	6,324	6,324	1.22	77
TOTAL TRANSMISSION PLANT		13,039,737	13,039,737	1.22	159,484
DISTRIBUTION PLANT					
361.1	STRUCTURES AND IMPROVEMENTS	1,297,037	1,343,103	1.28	16,897
361.2	STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	448,649	448,649	1.38	6,191
362	STATION EQUIPMENT	52,509,890	57,024,272	2.70	1,478,711
364	POLES, TOWERS AND FIXTURES	110,824,666	120,274,050	2.17	2,507,421
365	OVERHEAD CONDUCTORS AND DEVICES	116,208,290	129,163,442	2.35	2,883,118
365.1	OVERHEAD CONDUCTORS AND DEVICES - CLEARING AND GRADING	48,591,447	48,591,447	2.44	1,185,631
366	UNDERGROUND CONDUIT	7,645,677	7,699,286	1.87	143,475
367	UNDERGROUND CONDUCTORS AND DEVICES	66,219,919	70,996,721	2.20	1,509,383
368	LINE TRANSFORMERS	107,870,423	112,738,183	2.69	2,967,186
369	SERVICES	38,808,793	39,459,842	1.33	520,486
370.1	METERS - SMART GRID	36,175,333	38,703,871	9.04	3,384,540
371	INSTALLATIONS ON CUSTOMERS' PREMISES	3,792,738	3,792,738	2.14	81,165
373.1	STREET LIGHTING AND SIGNAL SYSTEMS	7,690,683	7,756,101	3.07	237,108
373.2	STREET LIGHTING AND SIGNAL SYSTEMS - ESIP	25,000	25,000	2.72	680
TOTAL DISTRIBUTION PLANT		598,108,544	638,016,705	2.74	16,921,992
GENERAL PLANT					
390.1	STRUCTURES AND IMPROVEMENTS	6,152,243	6,152,545	1.84	113,204
390.2	STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	41,299	41,299	2.25	929
391.1	OFFICE FURNITURE AND EQUIPMENT	391,660	148,053	15.57	42,017
391.2	DATA PROCESSING EQUIPMENT	1,157,387	346,983	9.54	71,758
391.25	DATA PROCESSING EQUIPMENT - SMART GRID	3,167,936	3,372,007	19.37	633,393
392	TRANSPORTATION EQUIPMENT	594,878	594,878	11.38	67,697
393	STORES EQUIPMENT	124,327	100,924	8.80	9,911
394	TOOLS, SHOP AND GARAGE EQUIPMENT	1,957,968	1,601,037	9.24	164,426
395	LABORATORY EQUIPMENT	29,574	21,571	4.99	1,276
396	POWER OPERATED EQUIPMENT	461,035	461,035	5.87	27,063
397	COMMUNICATION EQUIPMENT	2,123,962	2,101,683	9.92	209,592
398	MISCELLANEOUS EQUIPMENT	33,766	7,606	-	1,855
TOTAL GENERAL PLANT		16,236,037	14,949,621	8.61	1,343,121
SUBTOTAL DEPRECIABLE PLANT		643,593,327	684,889,252	2.98	19,819,676
NONDEPRECIABLE PLANT					
301	ORGANIZATION	22,834	22,834	-	-
302	FRANCHISES AND CONSENTS	68,666	68,666	-	-
350.1	LAND	2,089,804	2,089,804	-	-
350.2	EASEMENTS	8,430,107	8,430,107	-	-
360.1	LAND	578,457	578,457	-	-
360.2	EASEMENTS	5,802,870	5,802,870	-	-
374	DISTRIBUTION PLANT ARO	4,408	4,408	-	-
389.1	LAND	226,639	226,639	-	-
389.2	EASEMENTS	311	311	-	-
399.1	GENERAL PLANT ARO	32,875	32,875	-	-
SUBTOTAL NONDEPRECIABLE PLANT		17,256,971	17,256,971		0
TOTAL GAS PLANT		660,850,299	702,146,223		19,819,676

* Annual Accrual amount includes adjustment for new vintage assets

PENNSYLVANIA POWER COMPANY

TABLE 4. AMORTIZATION OF EXPERIENCED AND ESTIMATED NET SALVAGE

Account (1)	2013		2014		2015		2016		2017		Net Salvage (12)	Salvage Accrual (13)=(12)/5
	Cost of Removal (2)	Gross Salvage (3)	Cost of Removal (4)	Gross Salvage (5)	Cost of Removal (6)	Gross Salvage (7)	Cost of Removal (8)	Gross Salvage (9)	Cost of Removal (10)	Gross Salvage (11)		
352.1			1,549.65								(1,549.65)	(310)
353	48,560.22		844.17								(49,404.39)	(9,881)
355	3,252.85		22,084.12		2,167.61		44,772.80				(72,276.58)	(14,455)
356.1	51.28		12,111.73		2,948.95						(15,111.96)	(3,022)
362	520,665.89		166,530.97		1,316.45		98,327.00		255,815.00		(1,042,655.31)	(208,531)
364	1,092,276.41	167.86	467,581.73	1,482.81	572,485.14		2,176,051.00	8,704.00	2,624,829.00	10,499.00	(6,912,370.81)	(1,382,474)
365	1,227,445.37	80.32	970,948.36	31.81	686,375.24		1,006,035.00		1,194,753.00		(5,065,444.84)	(1,017,089)
366	439.41		1,082.54		56.38		2,240.00		2,085.00		(1,181)	(1,181)
367	408,750.48		187,384.00		40,435.35		531,882.00		599,754.00		(1,768,205.83)	(353,641)
368	510,189.38		323,360.85		285,595.58		98,121.00		118,980.00		(267,251)	(267,251)
369	149,726.71		97,706.45	1.41	103,281.74		172,452.00		144,678.00		(687,843.49)	(133,569)
370.1	3,513.53				(6.31)						(3,507.22)	(701)
371	17,817.70		9,162.55		3,474.90				3,344.00		(30,255.15)	(6,051)
373.1	62,686.99		35,346.79	233.82	75,686.03						(179,474.99)	(35,895)
373.2	23,946.56		453.42						3.00		(24,399.96)	(4,880)
380.1			13,712.56								(19,744.56)	(3,949)
391.2	27,891.33										(27,891.33)	(5,578)
392											1,062	
TOTAL	4,097,014.11	248.18	2,309,859.89	1,749.85	1,773,828.06	5,309.70	4,138,544.03	8,704.00	4,944,251.00	10,499.00	(17,236,986.33)	(3,447,396)

**PART II. DETAILED DEPRECIATION
CALCULATIONS**

CUMULATIVE DEPRECIATED ORIGINAL COST

PENNSYLVANIA POWER COMPANY

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	AMOUNT		DEPRECIATED ORIGINAL COST CUMULATIVE AMOUNT (5)		PCT OF COL 4 TOTAL (6)
			(2)	(3)	(4)	(5)	(6)
1892	13,916	13,916					0.0
1902	6,695	6,695					0.0
1905	232	232					0.0
1909	41	41					0.0
1910	86	86					0.0
1913	46,511	46,511					0.0
1916	62,646	62,646					0.0
1923	3,983	3,921		62	62		0.0
1924	1,317	1,211		106	168		0.0
1925	217	217			168		0.0
1926	523	459		64	232		0.0
1927	46,798	44,887		1,911	2,143		0.0
1928	7,435	7,363		72	2,215		0.0
1929	94,073	88,357		5,716	7,931		0.0
1930	107,720	100,381		7,339	15,270		0.0
1931	8,898	7,557		1,341	16,611		0.0
1932	3,299	2,681		618	17,229		0.0
1933	3,605	2,953		652	17,881		0.0
1934	7,840	6,795		1,045	18,926		0.0
1935	7,239	5,624		1,615	20,541		0.0
1936	10,468	7,852		2,616	23,157		0.0
1937	45,861	35,943		9,918	33,075		0.0
1938	28,182	20,885		7,297	40,372		0.0
1939	42,858	35,986		6,872	47,244		0.0
1940	62,101	49,960		12,141	59,385		0.0
1941	36,400	27,667		8,733	68,118		0.0
1942	18,443	15,347		3,096	71,214		0.0
1943	10,357	8,207		2,150	73,364		0.0
1944	17,070	13,381		3,689	77,053		0.0
1945	33,882	26,048		7,834	84,887		0.0
1946	49,481	37,811		11,670	96,557		0.0
1947	124,002	99,512		24,490	121,047		0.0
1948	202,016	155,948		46,068	167,115		0.0
1949	309,355	260,185		49,170	216,285		0.0
1950	297,019	232,143		64,876	281,161		0.1
1951	399,517	332,709		66,808	347,969		0.1
1952	430,432	346,442		83,990	431,959		0.1
1953	580,183	453,311		126,872	558,831		0.1
1954	497,374	384,960		112,414	671,245		0.1
1955	365,255	278,679		86,576	757,821		0.2
1956	643,624	528,530		115,094	872,915		0.2
1957	627,944	478,149		149,795	1,022,710		0.2
1958	790,620	615,462		175,158	1,197,868		0.2
1959	771,849	580,380		191,469	1,389,337		0.3
1960	1,277,947	1,060,767		217,180	1,606,517		0.3

PENNSYLVANIA POWER COMPANY

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
 RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	AMOUNT		DEPRECIATED ORIGINAL COST CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
			(2)	(3)		
			(4)			
1961	702,930	505,849		197,081	1,803,598	0.4
1962	979,428	708,123		271,305	2,074,903	0.4
1963	789,673	573,276		216,397	2,291,300	0.5
1964	844,403	599,148		245,255	2,536,555	0.5
1965	1,041,354	737,965		303,389	2,839,944	0.6
1966	1,394,360	990,616		403,744	3,243,688	0.7
1967	1,762,601	1,262,047		500,554	3,744,242	0.8
1968	1,484,305	1,039,153		445,152	4,189,394	0.9
1969	1,501,221	1,052,424		448,797	4,638,191	1.0
1970	1,609,756	1,145,875		463,881	5,102,072	1.1
1971	2,050,510	1,444,913		605,597	5,707,669	1.2
1972	2,114,292	1,494,125		620,167	6,327,836	1.3
1973	2,443,973	1,738,218		705,755	7,033,591	1.5
1974	2,798,092	1,939,675		858,417	7,892,008	1.6
1975	2,510,831	1,792,166		718,665	8,610,673	1.8
1976	2,097,447	1,453,149		644,298	9,254,971	1.9
1977	2,200,601	1,479,015		721,586	9,976,557	2.1
1978	3,452,976	2,311,666	1,141,310		11,117,867	2.3
1979	4,261,443	2,817,238	1,444,205		12,562,072	2.6
1980	4,392,368	2,778,117	1,614,251		14,176,323	2.9
1981	3,771,575	2,298,939	1,472,636		15,648,959	3.2
1982	3,793,610	2,353,175	1,440,435		17,089,394	3.5
1983	4,190,015	2,466,879	1,723,136		18,812,530	3.9
1984	5,157,992	3,060,038	2,097,954		20,910,484	4.3
1985	5,649,503	3,190,965	2,458,538		23,369,022	4.8
1986	6,937,379	4,016,340	2,921,039		26,290,061	5.4
1987	6,190,059	3,544,600	2,645,459		28,935,520	6.0
1988	8,024,834	4,405,559	3,619,275		32,554,795	6.7
1989	7,710,032	4,227,295	3,482,737		36,037,532	7.5
1990	10,498,345	5,714,148	4,784,197		40,821,729	8.5
1991	11,544,938	5,916,985	5,627,953		46,449,682	9.6
1992	12,267,103	6,085,306	6,181,797		52,631,479	10.9
1993	13,405,339	6,506,555	6,898,784		59,530,263	12.3
1994	14,993,544	7,140,277	7,853,267		67,383,530	14.0
1995	11,846,291	5,190,414	6,655,877		74,039,407	15.3
1996	12,199,543	5,120,734	7,078,809		81,118,216	16.8
1997	9,140,180	3,620,248	5,519,932		86,638,148	17.9
1998	10,529,895	3,999,792	6,530,103		93,168,251	19.3
1999	15,434,807	5,972,705	9,462,102		102,630,353	21.3
2000	6,791,705	2,278,442	4,513,263		107,143,616	22.2
2001	7,255,264	2,374,776	4,880,488		112,024,104	23.2
2002	8,201,771	2,521,606	5,680,165		117,704,269	24.4
2003	17,231,285	7,666,450	9,564,835		127,269,104	26.4
2004	15,780,452	5,234,244	10,546,208		137,815,312	28.5
2005	22,315,375	6,097,232	16,218,143		154,033,455	31.9

PENNSYLVANIA POWER COMPANY

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	AMOUNT		DEPRECIATED ORIGINAL COST CUMULATIVE AMOUNT (5)		PCT OF COL 4 TOTAL (6)
			(2)	(3)	(4)	(5)	(6)
2006	16,638,373	4,467,777			166,204,051		34.4
2007	21,018,424	5,898,225			181,324,250		37.6
2008	33,369,752	7,225,319			207,468,683		43.0
2009	22,891,657	4,875,222			225,485,118		46.7
2010	25,227,440	4,711,032			246,001,526		50.9
2011	26,280,988	4,600,216			267,682,298		55.4
2012	18,869,879	2,632,257			283,919,920		58.8
2013	31,925,362	3,963,402			311,881,880		64.6
2014	35,156,293	5,318,121			341,720,052		70.8
2015	60,896,357	8,930,574			393,685,835		81.5
2016	46,148,796	3,077,479			436,757,152		90.4
2017	47,077,217	959,668			482,874,701		100.0
TOTAL	684,889,252	202,014,551			482,874,701		

UTILITY PLANT IN SERVICE

PENNSYLVANIA POWER COMPANY

ACCOUNT 303 MISCELLANEOUS INTANGIBLE PLANT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 7-SQUARE						
NET SALVAGE PERCENT.. 0						
1993	99,278.97	99,279	99,279			
1994	446,063.10	446,063	446,063			
1997	8,663.23	8,663	8,663			
2000	2.32	2	2			
2001	3,197.36	3,197	3,197			
2002	33,814.52	33,815	33,815			
2003	3,440,300.85	3,440,301	3,440,301			
2004	946,850.53	946,851	946,851			
2005	214,018.90	214,019	214,019			
2006	338,760.01	338,760	338,760			
2007	1,360,073.16	1,360,073	1,360,073			
2008	203,737.79	203,738	203,738			
2009	571,873.64	571,874	571,874			
2010	222,528.47	222,528	222,528			
2011	765,152.22	710,497	698,294	66,858	0.50	66,858
2012	322,349.33	253,273	248,923	73,426	1.50	48,951
2013	613,591.02	394,453	387,678	225,913	2.50	90,365
2014	1,367,046.91	683,523	671,782	695,265	3.50	198,647
2015	763,973.34	272,845	268,159	495,814	4.50	110,181
2016	398,397.57	85,373	83,906	314,492	5.50	57,180
2017	679,997.21	48,572	47,738	632,259	6.50	97,271
	12,799,670.45	10,337,699	10,295,643	2,504,027		669,453
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						3.7 5.23

PENNSYLVANIA POWER COMPANY

ACCOUNT 303.1 MISCELLANEOUS INTANGIBLE PLANT - SMART METER SOFTWARE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 7-SQUARE						
NET SALVAGE PERCENT.. 0						
2014	618,192.34	309,096	295,519	322,673	3.50	92,192
2015	2,213,648.57	790,582	755,857	1,457,792	4.50	323,954
2016	1,257,495.90	269,469	257,633	999,863	5.50	181,793
2017	1,994,182.08	142,444	136,188	1,857,994	6.50	285,845
	6,083,518.89	1,511,591	1,445,197	4,638,322		883,784
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.2						14.53

PENNSYLVANIA POWER COMPANY

ACCOUNT 352.1 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R4						
NET SALVAGE PERCENT.. 0						
1892	13,916.46	13,916	13,916			
1902	6,694.84	6,695	6,695			
1905	231.68	232	232			
1910	39.90	40	40			
1916	60,448.97	60,449	60,449			
1924	43.93	44	44			
1927	8,724.08	8,527	8,724			
1928	177.84	174	178			
1929	1,767.51	1,721	1,768			
1930	14,505.87	14,088	14,506			
1934	1,584.41	1,521	1,584			
1937	73.90	70	74			
1939	22.85	22	23			
1940	2,686.64	2,520	2,687			
1947	1,236.71	1,125	1,237			
1948	143.92	130	144			
1949	25,332.31	22,733	25,332			
1950	5,551.99	4,947	5,552			
1951	2,081.51	1,855	2,082			
1952	33,072.03	29,242	33,072			
1953	10,213.52	8,959	10,214			
1954	6,627.96	5,766	6,628			
1955	1,809.72	1,561	1,810			
1956	4,607.45	3,938	4,607			
1957	6,127.12	5,190	6,127			
1958	14,126.41	11,852	14,126			
1959	2,837.39	2,340	2,837			
1961	7.14	6	7			
1962	4,535.32	3,625	4,535			
1963	4,319.60	3,413	4,276	44	14.47	3
1964	5,403.39	4,192	5,252	151	15.46	10
1965	78.02	60	75	3	15.99	
1966	6,356.12	4,812	6,029	327	16.53	20
1967	6,231.00	4,657	5,835	396	17.07	23
1968	4,648.62	3,429	4,296	353	17.61	20
1969	356.16	257	322	34	18.62	2
1970	311.02	222	278	33	19.17	2
1971	9,172.95	6,441	8,070	1,103	19.72	56
1972	5,037.91	3,461	4,336	702	20.73	34
1973	3,867.63	2,616	3,277	591	21.29	28
1974	13,131.54	8,740	10,950	2,182	21.86	100
1975	29,166.31	18,964	23,759	5,407	22.86	237

PENNSYLVANIA POWER COMPANY

ACCOUNT 352.1 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R4						
NET SALVAGE PERCENT.. 0						
1976	35,881.62	22,932	28,730	7,152	23.44	305
1977	3,830.92	2,389	2,993	838	24.44	34
1978	17,998.16	11,018	13,804	4,194	25.02	168
1979	52,736.79	31,674	39,683	13,054	25.60	510
1982	28,737.55	16,018	20,068	8,670	28.19	308
1984	20,936.53	11,082	13,884	7,053	29.79	237
1985	6,426.42	3,300	4,134	2,292	30.79	74
1986	18,049.02	9,039	11,325	6,724	31.40	214
1988	8,340.21	3,912	4,901	3,439	33.40	103
1989	25,492.68	11,625	14,565	10,928	34.00	321
1990	51,854.52	22,816	28,585	23,270	35.00	665
1991	16,292.51	6,908	8,655	7,638	36.00	212
1992	10,310.34	4,233	5,303	5,007	36.61	137
1993	43,358.46	17,101	21,425	21,933	37.61	583
1994	2,144.77	812	1,017	1,128	38.61	29
2013	104,744.96	7,688	9,632	95,113	56.85	1,673
2015	152.85	6	8	145	58.48	2
	764,597.96	457,105	534,697	229,901		6,110

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 37.6 0.80

PENNSYLVANIA POWER COMPANY

ACCOUNT 352.2 STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R4						
NET SALVAGE PERCENT.. 0						
1982	13,229.30	7,374	8,618	4,611	28.19	164
1984	39,203.31	20,750	24,251	14,952	29.79	502
1985	3,143.26	1,614	1,886	1,257	30.79	41
1986	26,663.57	13,353	15,606	11,058	31.40	352
1988	6,076.93	2,850	3,331	2,746	33.40	82
1989	21,430.98	9,773	11,422	10,009	34.00	294
1990	23,239.46	10,225	11,950	11,289	35.00	323
1991	48,827.78	20,703	24,197	24,631	36.00	684
1992	12,619.20	5,181	6,055	6,564	36.61	179
1993	782.14	308	360	422	37.61	11
	195,215.93	92,131	107,676	87,540		2,632

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 33.3 1.35

PENNSYLVANIA POWER COMPANY

ACCOUNT 353 STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 58-R2						
NET SALVAGE PERCENT.. 0						
1909	41.23	41	41			
1916	862.00	849	862			
1927	1,733.65	1,647	1,734			
1928	216.04	205	216			
1929	38,721.55	36,669	38,722			
1930	35,159.80	33,226	35,160			
1931	449.00	423	449			
1932	119.88	112	120			
1937	242.76	223	243			
1939	9,738.58	8,868	9,739			
1940	463.62	420	464			
1941	155.42	140	155			
1942	180.32	162	180			
1943	33.60	30	34			
1944	1,085.36	965	1,085			
1945	227.88	202	228			
1946	1,238.53	1,089	1,239			
1948	474.69	412	475			
1949	49,291.90	42,544	49,292			
1950	29,870.55	25,605	29,871			
1951	33,747.50	28,726	33,748			
1952	25,688.62	21,707	25,689			
1953	49,735.60	41,703	49,736			
1954	35,514.59	29,768	35,515			
1955	12,366.39	10,279	12,366			
1956	24,240.10	19,976	24,240			
1957	32,790.95	26,784	32,791			
1958	94,368.17	76,363	94,368			
1959	24,518.34	19,649	24,518			
1960	5,859.49	4,650	5,859			
1961	6,070.94	4,768	6,071			
1962	23,625.78	18,490	23,626			
1963	27,556.99	21,326	27,557			
1964	8,363.66	6,398	8,364			
1965	43,974.57	33,245	43,975			
1966	60,574.02	45,237	60,574			
1967	43,233.66	31,876	43,234			
1968	48,666.90	35,653	48,667			
1969	12,264.53	8,862	12,265			
1970	29,195.12	20,802	29,195			
1971	128,498.28	90,231	128,498			
1972	39,189.73	27,104	39,190			

PENNSYLVANIA POWER COMPANY

ACCOUNT 353 STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 58-R2						
NET SALVAGE PERCENT.. 0						
1973	63,794.82	43,432	63,508	287	20.86	14
1974	72,094.98	48,606	71,073	1,022	21.02	49
1975	222,163.45	147,294	215,379	6,784	21.60	314
1976	140,974.87	91,859	134,320	6,655	22.19	300
1977	83,335.49	53,326	77,975	5,360	22.79	235
1978	374,416.88	235,134	343,821	30,596	23.40	1,308
1979	318,711.15	197,537	288,846	29,865	23.61	1,265
1980	39,863.49	24,217	35,411	4,452	24.23	184
1981	30,851.19	18,356	26,841	4,010	24.85	161
1982	150,010.68	87,336	127,706	22,305	25.48	875
1983	87,184.01	49,930	73,009	14,175	25.74	551
1984	277,584.98	155,281	227,057	50,528	26.38	1,915
1985	198,696.60	108,488	158,635	40,062	27.02	1,483
1986	247,969.63	132,019	193,043	54,927	27.67	1,985
1987	867.95	453	662	206	27.98	7
1988	75,164.52	38,138	55,767	19,398	28.64	677
1989	179,799.81	88,641	129,614	50,186	29.31	1,712
1990	276,889.50	133,239	194,827	82,062	29.65	2,768
1991	539,140.12	251,455	367,686	171,454	30.32	5,655
1992	249,365.88	112,564	164,595	84,771	30.99	2,735
1993	313,176.03	137,359	200,851	112,325	31.36	3,582
1994	158,743.51	67,149	98,188	60,556	32.06	1,889
1995	151,659.94	62,105	90,812	60,848	32.45	1,875
1996	31,707.70	12,474	18,240	13,468	33.15	406
1997	973.99	369	540	434	33.56	13
1999	42,368.02	14,736	21,548	20,820	34.69	600
2000	133,700.87	44,228	64,672	69,029	35.41	1,949
2001	17,252.80	5,438	7,952	9,301	35.85	259
2002	84,278.95	25,216	36,872	47,407	36.31	1,306
2003	412,722.61	116,099	169,763	242,960	37.05	6,558
2006	137,385.34	31,599	46,205	91,180	38.50	2,368
2008	96,983.54	18,892	27,625	69,359	39.28	1,766
2011	38,981.24	5,395	7,889	31,092	40.45	769
2012	137,041.89	16,281	23,806	113,236	40.80	2,775
2013	40,864.62	4,046	5,916	34,949	40.95	853
2014	10,058.15	793	1,160	8,898	40.94	217
2015	604.29	35	51	553	40.79	14
	6,417,733.78	3,356,948	4,752,220	1,665,514		51,392

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 32.4 0.80

PENNSYLVANIA POWER COMPANY

ACCOUNT 354 TOWERS AND FIXTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 70-R4						
NET SALVAGE PERCENT.. 0						
1947	7,576.09	6,676	7,534	42	9.50	4
	7,576.09	6,676	7,534	42		4
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					10.5	0.05

PENNSYLVANIA POWER COMPANY

ACCOUNT 355 POLES AND FIXTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 62-R1.5						
NET SALVAGE PERCENT.. 0						
1927	316.66	287	311	6	9.50	1
1928	504.84	456	494	11	9.50	1
1929	98.89	89	96	3	9.54	
1930	1,742.17	1,570	1,701	41	9.59	4
1932	279.13	248	269	10	10.65	1
1935	208.63	184	199	10	10.95	1
1936	371.02	327	354	17	11.09	2
1937	962.88	837	907	56	12.09	5
1938	323.35	280	303	20	12.24	2
1939	2,217.33	1,915	2,074	143	12.41	12
1941	2,534.95	2,172	2,353	182	12.79	14
1942	2,293.74	1,957	2,120	174	12.99	13
1943	1,951.95	1,658	1,796	156	13.22	12
1944	372.89	312	338	35	14.22	2
1945	318.95	266	288	31	14.45	2
1947	7,141.75	5,891	6,381	761	14.97	51
1948	1,461.31	1,198	1,298	163	15.25	11
1949	13,157.45	10,726	11,618	1,539	15.53	99
1950	1,258.74	1,020	1,105	154	15.83	10
1951	7,580.85	6,100	6,608	973	16.15	60
1952	11,206.34	8,955	9,700	1,506	16.47	91
1953	7,014.64	5,565	6,028	987	16.80	59
1954	10,897.15	8,580	9,294	1,603	17.15	93
1955	13,073.55	10,213	11,063	2,011	17.50	115
1956	3,140.24	2,433	2,635	505	17.87	28
1957	3,845.19	2,955	3,201	644	18.24	35
1958	4,824.99	3,675	3,981	844	18.62	45
1959	12,951.03	9,773	10,586	2,365	19.02	124
1960	8,303.54	6,207	6,723	1,581	19.42	81
1961	3,332.54	2,467	2,672	661	19.83	33
1962	6,385.91	4,678	5,067	1,319	20.26	65
1963	2,573.14	1,865	2,020	553	20.69	27
1964	8,895.18	6,377	6,908	1,987	21.13	94
1965	10,057.32	7,129	7,722	2,335	21.57	108
1966	11,276.85	7,898	8,555	2,722	22.03	124
1967	52,663.82	36,433	39,464	13,200	22.50	587
1968	19,347.05	13,216	14,316	5,031	22.96	219
1969	12,536.39	8,452	9,155	3,381	23.44	144
1970	24,782.67	16,480	17,851	6,932	23.93	290
1971	12,065.88	7,910	8,568	3,498	24.43	143
1972	30,479.02	19,692	21,331	9,148	24.92	367
1973	49,389.56	31,432	34,047	15,343	25.43	603

PENNSYLVANIA POWER COMPANY

ACCOUNT 355 POLES AND FIXTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 62-R1.5						
NET SALVAGE PERCENT.. 0						
1974	5,218.57	3,269	3,541	1,678	25.94	65
1975	4,692.64	2,892	3,133	1,560	26.47	59
1976	3,570.09	2,163	2,343	1,227	26.99	45
1977	3,798.97	2,262	2,450	1,349	27.52	49
1978	4,284.45	2,505	2,713	1,571	28.07	56
1979	17,811.78	10,286	11,142	6,670	28.17	237
1980	3,848.18	2,179	2,360	1,488	28.73	52
1981	3,738.72	2,074	2,247	1,492	29.29	51
1982	34,090.82	18,518	20,059	14,032	29.86	470
1983	19,060.11	10,127	10,970	8,090	30.44	266
1984	14,653.74	7,658	8,295	6,359	30.60	208
1985	22,343.77	11,400	12,349	9,995	31.20	320
1986	177,170.37	88,178	95,515	81,655	31.79	2,569
1987	34,463.74	16,715	18,106	16,358	32.39	505
1988	5,893.12	2,799	3,032	2,861	32.61	88
1989	6,571.06	3,034	3,286	3,285	33.23	99
1990	29,619.08	13,275	14,380	15,239	33.85	450
1991	21,897.97	9,574	10,371	11,527	34.11	338
1992	54,096.80	22,899	24,804	29,293	34.74	843
1993	47,074.07	19,376	20,988	26,086	35.02	745
1994	21,218.68	8,428	9,129	12,090	35.67	339
1995	51,060.16	19,648	21,283	29,777	35.98	828
1996	44,577.89	16,583	17,963	26,615	36.30	733
1998	7,907.56	2,714	2,940	4,968	37.32	133
1999	18,549.71	6,108	6,616	11,934	37.68	317
2000	8,064.90	2,540	2,751	5,314	38.06	140
2003	173,837.44	46,884	50,785	123,052	39.26	3,134
2004	604,099.13	153,320	166,078	438,021	39.69	11,036
2005	8,833.08	2,109	2,284	6,549	39.85	164
2006	19,600.29	4,373	4,737	14,863	40.05	371
2007	23,299.06	4,818	5,219	18,080	40.26	449
2008	152,089.61	28,897	31,301	120,789	40.50	2,982
2009	69,961.92	12,075	13,080	56,882	40.76	1,396
2010	24,447.25	3,794	4,110	20,337	40.81	498
2011	339,996.70	46,648	50,529	289,468	40.89	7,079
2012	14,408.98	1,720	1,863	12,546	40.58	309
2013	54,949.94	5,517	5,976	48,974	40.34	1,214

PENNSYLVANIA POWER COMPANY

ACCOUNT 355 POLES AND FIXTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 62-R1.5						
NET SALVAGE PERCENT.. 0						
2014	2,107.46	170	184	1,923	39.98	48
2015	150,301.68	9,018	9,769	140,533	39.17	3,588
2016	158,203.90	6,043	6,546	151,658	37.72	4,021
	2,825,552.87	892,468	966,727	1,858,826		50,072
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						37.1 1.77

PENNSYLVANIA POWER COMPANY

ACCOUNT 356 OVERHEAD CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 62-R2						
NET SALVAGE PERCENT.. 0						
1913	46,510.86	45,199	46,511			
1916	13.62	13	14			
1923	3,433.93	3,245	3,434			
1925	217.12	203	217			
1927	12,826.88	11,957	12,827			
1928	2,714.90	2,527	2,715			
1929	6,238.05	5,796	6,238			
1930	3,479.66	3,197	3,480			
1931	521.15	478	521			
1934	197.97	180	198			
1936	78.62	70	79			
1937	1,780.73	1,591	1,781			
1938	393.06	350	393			
1939	3,546.49	3,146	3,546			
1940	1,044.00	922	1,044			
1941	2,800.82	2,464	2,801			
1942	2,761.84	2,419	2,762			
1943	194.46	169	194			
1944	13.66	12	14			
1945	297.54	257	298			
1946	155.69	134	156			
1947	13,059.23	11,140	13,059			
1948	7,524.62	6,380	7,525			
1949	26,594.60	22,225	26,595			
1950	3,410.53	2,831	3,411			
1951	9,797.88	8,079	9,737	61	14.15	4
1952	18,578.53	15,212	18,333	246	14.50	17
1953	6,928.41	5,631	6,786	142	14.87	10
1954	23,355.81	18,834	22,698	658	15.24	43
1955	17,037.65	13,630	16,426	612	15.62	39
1956	1,219.79	968	1,167	53	16.02	3
1957	6,394.65	5,029	6,061	334	16.42	20
1958	3,101.71	2,417	2,913	189	16.84	11
1959	9,127.32	7,048	8,494	633	17.26	37
1960	835.08	639	770	65	17.68	4
1961	2,324.50	1,760	2,121	204	18.13	11
1962	7,077.83	5,303	6,391	687	18.58	37
1963	1,187.51	880	1,061	127	19.03	7
1964	9,147.61	6,705	8,081	1,067	19.49	55
1965	10,017.34	7,258	8,747	1,270	19.96	64
1966	9,534.90	6,825	8,225	1,310	20.45	64
1967	28,666.38	20,267	24,425	4,241	20.93	203

PENNSYLVANIA POWER COMPANY

ACCOUNT 356 OVERHEAD CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 62-R2						
NET SALVAGE PERCENT.. 0						
1968	24,736.08	17,266	20,808	3,928	21.42	183
1969	18,327.73	12,712	15,320	3,008	21.43	140
1970	38,696.56	26,468	31,898	6,799	21.94	310
1971	14,785.09	9,968	12,013	2,772	22.47	123
1972	33,435.27	22,211	26,768	6,667	22.99	290
1973	90,837.03	59,426	71,618	19,219	23.52	817
1974	4,809.72	3,096	3,731	1,079	24.07	45
1975	1,926.80	1,220	1,470	457	24.62	19
1976	2,860.23	1,780	2,145	715	25.17	28
1977	920.87	563	679	242	25.72	9
1978	326.28	196	236	90	26.29	3
1979	23,953.48	14,109	17,004	6,949	26.86	259
1980	1,327.31	767	924	403	27.44	15
1981	3,305.59	1,870	2,254	1,052	28.01	38
1982	5,026.30	2,784	3,355	1,671	28.60	58
1983	3,582.06	1,953	2,354	1,228	28.79	43
1984	25,794.87	13,738	16,557	9,238	29.40	314
1985	5,808.49	3,020	3,640	2,168	30.00	72
1986	168,621.45	85,525	103,072	65,549	30.61	2,141
1987	15,819.12	7,816	9,420	6,399	31.23	205
1988	5,557.78	2,672	3,220	2,338	31.85	73
1989	6,336.79	2,962	3,570	2,767	32.48	85
1990	7,541.39	3,443	4,149	3,392	32.74	104
1991	12,943.29	5,729	6,904	6,039	33.38	181
1992	16,084.13	6,890	8,304	7,780	34.02	229
1993	11,451.48	4,741	5,714	5,737	34.67	165
1994	13,219.17	5,311	6,401	6,818	34.98	195
1996	69,897.46	26,002	31,337	38,560	36.30	1,062
1997	1,954.42	701	845	1,109	36.64	30
1998	8,508.98	2,920	3,519	4,990	37.32	134
1999	81.74	27	33	49	38.00	1
2000	7,814.47	2,447	2,949	4,865	38.37	127
2001	9,062.63	2,692	3,244	5,819	39.06	149
2002	46,708.77	13,177	15,880	30,829	39.45	781
2003	31,199.66	8,280	9,979	21,221	40.14	529
2004	270,112.12	67,474	81,317	188,795	40.55	4,656
2005	10,482.32	2,451	2,954	7,528	40.97	184
2006	1,766.43	384	463	1,303	41.41	31
2007	35,906.29	7,203	8,681	27,225	41.85	651
2008	126,307.50	23,165	27,918	98,390	42.31	2,325
2009	146,394.48	24,272	29,252	117,142	42.78	2,738
2010	152,879.53	22,703	27,361	125,519	43.01	2,918

PENNSYLVANIA POWER COMPANY

ACCOUNT 356 OVERHEAD CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 62-R2						
NET SALVAGE PERCENT.. 0						
2011	141,523.20	18,398	22,172	119,351	43.50	2,744
2012	67,420.91	7,524	9,068	58,353	43.76	1,333
2013	131,473.32	12,253	14,767	116,706	43.81	2,664
2014	38,807.79	2,864	3,452	35,356	43.90	805
2015	561,531.11	30,435	36,678	524,853	43.59	12,041
	2,722,010.42	846,998	1,007,646	1,714,364		42,676
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						40.2 1.57

PENNSYLVANIA POWER COMPANY

ACCOUNT 357 UNDERGROUND CONDUIT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-S2.5						
NET SALVAGE PERCENT.. 0						
1973	64,301.63	53,222	55,597	8,705	9.26	940
2000	352.23	147	154	198	24.34	8
	64,653.86	53,369	55,751	8,903		948
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						9.4 1.47

PENNSYLVANIA POWER COMPANY

ACCOUNT 358 UNDERGROUND CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 40-S1.5						
NET SALVAGE PERCENT.. 0						
1973	34,544.79	28,748	29,865	4,680	8.97	522
2000	490.91	229	238	253	19.96	13
2009	1,034.11	255	265	769	25.98	30
2015	1.51			2	30.83	
	36,071.32	29,232	30,368	5,703		565
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						10.1 1.57

PENNSYLVANIA POWER COMPANY

ACCOUNT 359 ROADS AND TRAILS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S2.5						
NET SALVAGE PERCENT.. 0						
1966	2,500.63	2,009	2,203	298	12.60	24
1976	3,823.81	2,729	2,993	831	16.64	50
	6,324.44	4,738	5,196	1,128		74
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					15.2	1.17

PENNSYLVANIA POWER COMPANY

ACCOUNT 361.1 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R3						
NET SALVAGE PERCENT.. 0						
1910	45.82	46	46			
1924	58.11	56	58			
1927	1,198.83	1,139	1,199			
1928	239.99	228	240			
1929	3,241.82	3,070	3,242			
1930	2,750.26	2,599	2,750			
1934	1,122.82	1,041	1,123			
1938	209.60	192	210			
1939	32.20	29	32			
1944	497.64	443	498			
1947	1,781.18	1,557	1,781			
1948	207.73	180	208			
1949	5,995.07	5,174	5,995			
1950	6,547.80	5,613	6,548			
1951	4,142.65	3,526	4,143			
1952	15,761.24	13,318	15,761			
1953	13,119.13	11,000	13,119			
1954	9,671.02	8,044	9,671			
1955	2,644.74	2,182	2,645			
1956	7,131.80	5,834	7,132			
1957	8,978.13	7,279	8,978			
1958	12,772.30	10,259	12,772			
1959	4,167.86	3,316	4,168			
1961	10.52	8	10	1	15.96	
1962	6,683.10	5,155	6,562	121	16.45	7
1963	6,371.55	4,827	6,144	228	17.44	13
1964	768.72	576	733	36	17.93	2
1965	115.28	85	108	7	18.43	
1966	26,277.35	19,217	24,462	1,815	18.92	96
1967	3,975.72	2,871	3,655	321	19.43	17
1968	6,884.12	4,907	6,246	638	19.94	32
1969	3,041.01	2,138	2,721	320	20.47	16
1970	461.17	320	407	54	20.99	3
1971	8,191.61	5,561	7,079	1,113	21.99	51
1972	7,479.33	5,002	6,367	1,112	22.53	49
1973	5,745.03	3,784	4,817	928	23.07	40
1974	20,840.11	13,509	17,196	3,644	23.61	154
1975	13,920.12	8,874	11,296	2,624	24.17	109
1976	11,046.52	6,876	8,753	2,294	25.17	91
1977	5,628.29	3,442	4,381	1,247	25.72	48
1978	4,470.79	2,684	3,417	1,054	26.29	40
1979	27,652.79	16,287	20,732	6,921	26.86	258

PENNSYLVANIA POWER COMPANY

ACCOUNT 361.1 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R3						
NET SALVAGE PERCENT.. 0						
1982	5,522.32	3,038	3,867	1,655	29.02	57
1984	13,146.58	6,915	8,802	4,345	30.19	144
1985	4,653.95	2,374	3,022	1,632	31.20	52
1986	35,662.17	17,749	22,593	13,069	31.79	411
1988	12,386.10	5,809	7,394	4,992	33.40	149
1989	36,467.68	16,629	21,167	15,301	34.00	450
1990	44,633.14	19,764	25,158	19,475	34.61	563
1991	20,218.30	8,680	11,049	9,169	35.23	260
1992	10,838.16	4,477	5,699	5,139	36.23	142
1993	138,964.23	55,502	70,649	68,315	36.85	1,854
1994	23,318.04	8,987	11,440	11,878	37.48	317
1995	855.24	316	402	453	38.48	12
1996	64,462.56	22,871	29,113	35,350	39.10	904
2007	224,523.20	40,549	51,615	172,908	47.64	3,629
2008	91,794.31	14,999	19,093	72,701	48.64	1,495
2009	143,601.72	21,109	26,870	116,732	49.31	2,367
2011	10,262.35	1,161	1,478	8,784	50.97	172
2014	24,642.82	1,528	1,945	22,698	52.99	428
2015	104,025.59	4,629	5,892	98,134	53.68	1,828
2016	20,059.81	538	685	19,375	54.37	356
2017	51,183.48	466	593	50,590	54.45	929
	1,343,102.62	450,338	565,931	777,172		17,545
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						44.3 1.31

PENNSYLVANIA POWER COMPANY

ACCOUNT 361.2 STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R3						
NET SALVAGE PERCENT.. 0						
1982	10,423.29	5,735	7,255	3,168	29.02	109
1984	22,196.95	11,676	14,771	7,426	30.19	246
1985	4,714.89	2,406	3,044	1,671	31.20	54
1986	27,260.71	13,568	17,165	10,096	31.79	318
1988	9,123.84	4,279	5,413	3,711	33.40	111
1989	32,176.26	14,672	18,561	13,615	34.00	400
1990	52,686.14	23,329	29,513	23,173	34.61	670
1991	55,883.01	23,991	30,351	25,532	35.23	725
1992	17,590.91	7,267	9,193	8,398	36.23	232
1993	43,941.89	17,550	22,203	21,739	36.85	590
1994	22,576.32	8,701	11,008	11,568	37.48	309
2005	137,521.89	29,223	36,970	100,552	46.32	2,171
2007	12,535.66	2,264	2,864	9,672	47.64	203
2012	6.01	1	1	5	51.65	
2015	10.94			11	53.68	
	448,648.71	164,662	208,312	240,337		6,138

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 39.2 1.37

PENNSYLVANIA POWER COMPANY

ACCOUNT 362 STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R0.5						
NET SALVAGE PERCENT.. 0						
1916	1,320.98	1,321	1,321			
1923	548.96	534	487	62	2.58	24
1924	192.64	187	170	23	2.65	9
1926	523.22	503	459	64	3.73	17
1927	4,127.64	3,922	3,575	553	4.74	117
1928	215.87	205	187	29	4.84	6
1929	38,448.23	36,410	33,189	5,259	4.95	1,062
1930	38,063.12	35,635	32,483	5,580	5.96	936
1931	35.93	34	31	5	6.09	1
1933	54.56	51	46	9	6.41	1
1936	477.27	436	397	80	7.79	10
1937	14.30	13	12	2	8.00	
1938	106.75	96	88	19	8.99	2
1939	5,272.19	4,718	4,301	971	9.22	105
1940	14,406.27	12,839	11,703	2,703	9.46	286
1941	751.53	667	608	144	9.71	15
1942	399.53	353	322	78	9.97	8
1943	154.95	136	124	31	10.25	3
1944	4,578.65	4,004	3,650	929	10.54	88
1945	914.45	796	726	188	10.83	17
1946	2,257.90	1,954	1,781	477	11.14	43
1948	43,536.69	36,915	33,650	9,887	12.47	793
1949	31,248.91	26,330	24,001	7,248	12.80	566
1950	43,694.64	36,572	33,337	10,358	13.15	788
1951	11,488.29	9,549	8,704	2,784	13.50	206
1952	86,114.56	71,070	64,783	21,332	13.87	1,538
1953	171,478.52	141,573	129,050	42,429	13.62	3,115
1954	80,824.97	66,212	60,355	20,470	14.02	1,460
1955	23,545.42	19,131	17,439	6,106	14.42	423
1956	44,691.89	36,004	32,819	11,873	14.84	800
1957	105,829.30	84,515	77,039	28,790	15.26	1,887
1958	141,789.07	112,212	102,286	39,503	15.68	2,519
1959	22,403.42	17,562	16,009	6,394	16.13	396
1960	17,318.19	13,442	12,253	5,065	16.58	305
1961	36,066.38	27,915	25,446	10,620	16.50	644
1962	52,580.43	40,271	36,709	15,871	16.96	936
1963	23,062.83	17,472	15,926	7,137	17.44	409
1964	22,073.18	16,533	15,071	7,002	17.93	391
1965	105,938.84	78,416	71,479	34,460	18.43	1,870
1966	154,216.49	113,565	103,519	50,697	18.43	2,751
1967	346,765.11	252,168	229,862	116,903	18.94	6,172
1968	204,850.85	147,042	134,035	70,816	19.46	3,639

PENNSYLVANIA POWER COMPANY

ACCOUNT 362 STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R0.5						
NET SALVAGE PERCENT.. 0						
1969	98,733.25	70,397	64,170	34,563	19.52	1,771
1970	105,880.01	74,434	67,850	38,030	20.07	1,895
1971	149,748.38	104,449	95,210	54,538	20.17	2,704
1972	168,297.21	115,620	105,393	62,904	20.73	3,034
1973	223,782.52	151,366	137,976	85,807	21.29	4,030
1974	484,210.58	324,373	295,680	188,531	21.44	8,793
1975	163,271.63	107,563	98,048	65,224	22.01	2,963
1976	139,767.91	91,073	83,017	56,751	22.19	2,558
1977	302,769.76	194,984	177,736	125,034	22.39	5,584
1978	443,596.33	280,353	255,554	188,042	23.00	8,176
1979	758,276.57	472,937	431,102	327,175	23.23	14,084
1980	379,757.60	233,551	212,892	166,866	23.48	7,107
1981	107,262.30	64,593	58,879	48,383	24.11	2,007
1982	220,236.35	130,556	119,007	101,229	24.38	4,152
1983	14,526.35	8,469	7,720	6,806	24.67	276
1984	532,600.27	305,073	278,087	254,513	24.98	10,189
1985	227,292.24	127,784	116,481	110,811	25.31	4,378
1986	575,053.28	316,969	288,931	286,122	25.65	11,155
1987	259,240.45	139,938	127,559	131,681	26.00	5,065
1988	236,199.47	124,713	113,681	122,518	26.37	4,646
1989	776,657.78	400,600	365,164	411,494	26.75	15,383
1990	925,540.05	465,732	424,534	501,006	27.15	18,453
1991	1,950,163.85	961,236	876,207	1,073,957	27.26	39,397
1992	1,640,069.87	786,249	716,699	923,371	27.69	33,347
1993	1,287,388.92	602,498	549,202	738,187	27.85	26,506
1994	1,621,223.71	735,387	670,336	950,888	28.31	33,588
1995	541,213.09	238,675	217,562	323,651	28.52	11,348
1996	564,478.47	241,484	220,123	344,355	28.75	11,978
1997	420,270.21	174,034	158,639	261,631	29.00	9,022
1998	336,404.83	134,495	122,598	213,807	29.28	7,302
1999	656,987.11	252,809	230,446	426,541	29.58	14,420
2000	428,139.99	158,840	144,789	283,351	29.67	9,550
2001	1,217,408.33	433,884	395,504	821,904	29.80	27,581
2002	813,831.02	277,516	252,968	560,863	29.95	18,727
2003	313,461.68	101,812	92,806	220,656	30.14	7,321
2004	711,877.88	220,113	200,642	511,236	30.17	16,945
2005	4,664,186.53	1,364,275	1,243,594	3,420,593	30.24	113,115
2006	760,648.31	209,939	191,368	569,280	30.17	18,869
2007	3,163,238.88	817,065	744,789	2,418,450	30.15	80,214
2008	4,506,078.83	1,083,261	987,439	3,518,640	30.02	117,210
2009	3,016,889.29	666,733	607,755	2,409,134	29.96	80,412
2010	505,204.03	101,950	92,932	412,272	29.67	13,895

PENNSYLVANIA POWER COMPANY

ACCOUNT 362 STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R0.5						
NET SALVAGE PERCENT.. 0						
2011	768,975.93	139,492	127,153	641,823	29.34	21,875
2012	904,829.83	144,320	131,554	773,276	28.98	26,683
2013	1,388,694.93	190,529	173,675	1,215,020	28.29	42,949
2014	1,155,863.28	130,613	119,059	1,036,804	27.46	37,757
2015	7,542,864.58	654,721	596,806	6,946,059	26.32	263,908
2016	1,952,814.97	113,068	103,066	1,849,749	24.41	75,778
2017	5,015,980.79	121,387	110,650	4,905,331	20.12	243,804
	57,024,272.35	16,831,195	15,342,464	41,681,808		1,576,262
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						26.4 2.76

PENNSYLVANIA POWER COMPANY

ACCOUNT 364 POLES, TOWERS AND FIXTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
1935	127.77	120	105	23	5.22	4
1936	1,059.20	993	865	194	5.46	36
1937	16,550.36	15,455	13,464	3,086	5.71	540
1938	3,257.46	3,030	2,640	617	5.97	103
1939	5,082.46	4,708	4,101	981	6.25	157
1940	3,874.32	3,573	3,113	761	6.54	116
1941	4,984.04	4,575	3,986	998	6.83	146
1942	3,304.05	3,019	2,630	674	7.14	94
1943	2,400.90	2,182	1,901	500	7.47	67
1944	2,691.03	2,433	2,120	571	7.80	73
1945	3,006.72	2,703	2,355	652	8.15	80
1946	5,477.18	4,896	4,265	1,212	8.50	143
1947	11,744.43	10,516	9,161	2,583	8.24	313
1948	24,683.37	21,958	19,129	5,554	8.62	644
1949	35,290.86	31,183	27,166	8,125	9.02	901
1950	37,309.45	32,739	28,521	8,788	9.42	933
1951	58,077.16	50,597	44,079	13,998	9.83	1,424
1952	49,722.21	42,990	37,452	12,270	10.26	1,196
1953	91,528.82	79,108	68,917	22,612	10.13	2,232
1954	93,433.80	80,091	69,773	23,661	10.58	2,236
1955	85,535.97	72,706	63,340	22,196	11.03	2,012
1956	125,385.20	105,650	92,040	33,345	11.49	2,902
1957	38,686.42	32,299	28,138	10,548	11.96	882
1958	119,845.57	99,831	86,970	32,876	11.93	2,756
1959	197,965.07	163,282	142,247	55,718	12.43	4,483
1960	204,765.05	167,191	145,653	59,112	12.92	4,575
1961	213,245.55	172,302	150,105	63,141	13.43	4,701
1962	241,900.00	194,681	169,601	72,299	13.46	5,371
1963	233,756.37	186,000	162,039	71,717	13.99	5,126
1964	292,473.38	230,001	200,371	92,102	14.53	6,339
1965	325,757.02	253,113	220,506	105,251	15.07	6,984
1966	434,799.98	335,883	292,613	142,187	15.17	9,373
1967	409,889.66	312,582	272,314	137,576	15.72	8,752
1968	402,879.63	303,127	264,077	138,803	16.29	8,521
1969	456,877.06	341,241	297,281	159,596	16.44	9,708
1970	421,764.16	310,503	270,503	151,261	17.02	8,887
1971	537,115.08	389,623	339,430	197,685	17.60	11,232
1972	540,897.29	386,417	336,637	204,260	18.19	11,229
1973	498,746.29	352,913	307,449	191,297	18.39	10,402
1974	661,197.24	460,193	400,909	260,288	19.00	13,699
1975	681,527.70	466,301	406,230	275,298	19.61	14,039
1976	567,377.97	383,774	334,334	233,044	19.85	11,740

PENNSYLVANIA POWER COMPANY

ACCOUNT 364 POLES, TOWERS AND FIXTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
1977	510,940.64	339,367	295,648	215,293	20.48	10,512
1978	781,172.43	509,168	443,575	337,597	21.10	16,000
1979	883,365.08	568,004	494,831	388,534	21.38	18,173
1980	1,194,694.26	752,657	655,696	538,998	22.02	24,478
1981	1,461,878.41	901,687	785,527	676,351	22.67	29,835
1982	1,251,979.83	759,952	662,051	589,929	22.98	25,671
1983	1,824,279.93	1,082,528	943,072	881,208	23.64	37,276
1984	1,362,242.58	789,556	687,842	674,401	24.30	27,753
1985	1,939,185.44	1,103,009	960,914	978,271	24.64	39,703
1986	1,696,744.21	940,675	819,493	877,251	25.32	34,647
1987	1,910,794.62	1,037,370	903,731	1,007,064	25.68	39,216
1988	2,205,522.17	1,164,516	1,014,497	1,191,025	26.37	45,166
1989	1,918,337.56	989,479	862,010	1,056,328	26.75	39,489
1990	2,154,186.70	1,078,170	939,275	1,214,912	27.45	44,259
1991	2,365,545.43	1,153,440	1,004,848	1,360,697	27.85	48,858
1992	2,462,591.53	1,161,851	1,012,176	1,450,416	28.55	50,803
1993	2,997,750.30	1,373,569	1,196,619	1,801,131	28.97	62,172
1994	3,084,571.89	1,362,764	1,187,206	1,897,366	29.69	63,906
1995	2,277,697.29	973,716	848,277	1,429,420	30.13	47,442
1996	2,586,615.80	1,062,064	925,244	1,661,372	30.86	53,836
1997	2,029,212.58	802,756	699,341	1,329,872	31.32	42,461
1998	2,832,950.98	1,077,088	938,332	1,894,619	31.78	59,617
1999	2,073,346.08	751,795	654,945	1,418,401	32.52	43,616
2000	2,069,107.03	716,946	624,586	1,444,521	33.01	43,760
2001	1,876,207.58	619,149	539,387	1,336,821	33.50	39,905
2002	2,117,313.58	662,931	577,529	1,539,785	34.00	45,288
2003	2,904,925.93	859,277	748,581	2,156,345	34.52	62,467
2004	1,967,207.92	547,081	476,603	1,490,605	35.04	42,540
2005	2,948,111.88	766,509	667,764	2,280,348	35.58	64,091
2006	2,552,042.45	616,318	536,921	2,015,121	36.12	55,790
2007	2,181,228.68	485,542	422,992	1,758,237	36.67	47,948
2008	3,292,708.45	672,371	585,753	2,706,955	37.01	73,141
2009	3,185,307.12	587,371	511,703	2,673,604	37.59	71,125
2010	3,783,940.53	624,350	543,918	3,240,023	37.95	85,376
2011	3,727,371.52	540,469	470,843	3,256,529	38.34	84,938
2012	3,183,815.91	397,340	346,153	2,837,663	38.56	73,591
2013	2,970,831.44	308,966	269,164	2,701,667	38.79	69,649
2014	5,526,273.80	456,470	397,666	5,128,608	38.87	131,943

PENNSYLVANIA POWER COMPANY

ACCOUNT 364 POLES, TOWERS AND FIXTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. 0						
2015	4,850,363.61	293,447	255,644	4,594,720	38.82	118,360
2016	8,686,377.63	328,345	286,046	8,400,332	38.18	220,019
2017	10,499,315.64	144,891	126,225	10,373,091	35.86	289,266
	120,274,049.69	37,479,436	32,651,158	87,622,892		2,699,237
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						32.5 2.24

PENNSYLVANIA POWER COMPANY

ACCOUNT 365 OVERHEAD CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R1						
NET SALVAGE PERCENT.. 0						
1928	127.62	115	96	32	9.50	3
1929	1,818.71	1,642	1,364	455	9.54	48
1930	5,994.22	5,402	4,489	1,505	9.59	157
1931	4,864.07	4,334	3,601	1,263	10.58	119
1932	2,225.39	1,979	1,644	581	10.65	55
1933	2,234.57	1,983	1,648	587	10.74	55
1934	3,626.78	3,180	2,642	985	11.73	84
1935	5,527.10	4,833	4,016	1,511	11.84	128
1936	8,426.29	7,348	6,105	2,321	11.96	194
1937	24,363.33	21,181	17,599	6,764	12.09	559
1938	23,644.75	20,491	17,026	6,619	12.24	541
1939	16,497.83	14,116	11,729	4,769	13.25	360
1940	22,796.07	19,434	16,148	6,648	13.41	496
1941	25,167.95	21,373	17,759	7,409	13.59	545
1942	6,438.81	5,445	4,524	1,915	13.79	139
1943	4,630.13	3,898	3,239	1,391	14.00	99
1944	6,686.64	5,554	4,615	2,072	14.99	138
1945	19,631.26	16,225	13,481	6,150	15.22	404
1946	30,337.78	24,944	20,726	9,612	15.46	622
1947	65,847.98	53,850	44,744	21,104	15.71	1,343
1948	90,837.94	73,869	61,377	29,461	15.97	1,845
1949	97,940.35	79,165	65,778	32,162	16.25	1,979
1950	136,988.14	110,029	91,423	45,565	16.54	2,755
1951	138,836.52	109,875	91,295	47,542	17.53	2,712
1952	138,922.86	109,193	90,728	48,195	17.83	2,703
1953	169,940.07	132,621	110,194	59,746	18.15	3,292
1954	185,270.04	143,529	119,258	66,012	18.47	3,574
1955	154,007.57	118,401	98,379	55,629	18.80	2,959
1956	165,933.62	126,541	105,142	60,792	19.15	3,175
1957	254,413.35	192,387	159,854	94,559	19.50	4,849
1958	228,339.42	171,186	142,238	86,101	19.87	4,333
1959	265,914.35	197,574	164,164	101,750	20.24	5,027
1960	244,884.70	180,235	149,757	95,128	20.62	4,613
1961	260,697.83	189,997	157,868	102,830	21.02	4,892
1962	407,498.96	294,010	244,292	163,207	21.42	7,619
1963	279,299.11	199,420	165,697	113,602	21.83	5,204
1964	291,661.23	205,971	171,141	120,520	22.26	5,414
1965	318,787.46	222,577	184,938	133,849	22.69	5,899
1966	395,881.17	273,198	226,999	168,882	23.13	7,301
1967	335,893.24	229,012	190,285	145,608	23.57	6,178
1968	377,599.00	254,200	211,214	166,385	24.03	6,924
1969	379,467.95	252,119	209,485	169,983	24.50	6,938

PENNSYLVANIA POWER COMPANY

ACCOUNT 365 OVERHEAD CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R1						
NET SALVAGE PERCENT.. 0						
1970	322,094.93	211,133	175,430	146,665	24.96	5,876
1971	469,688.75	303,607	252,266	217,423	25.44	8,547
1972	397,446.95	255,002	211,880	185,567	25.42	7,300
1973	468,376.67	295,967	245,918	222,459	25.92	8,583
1974	375,600.27	233,623	194,116	181,484	26.43	6,867
1975	321,138.39	196,537	163,302	157,836	26.94	5,859
1976	292,200.79	175,846	146,110	146,091	27.46	5,320
1977	305,402.79	181,837	151,088	154,315	27.52	5,607
1978	520,418.18	304,236	252,789	267,629	28.07	9,534
1979	413,920.01	237,425	197,276	216,644	28.62	7,570
1980	664,488.55	373,775	310,568	353,921	29.17	12,133
1981	538,648.07	298,842	248,307	290,341	29.29	9,913
1982	391,516.12	212,672	176,708	214,808	29.86	7,194
1983	557,898.11	296,411	246,287	311,611	30.44	10,237
1984	681,262.34	356,028	295,822	385,440	30.60	12,596
1985	1,151,175.93	587,330	488,010	663,166	31.20	21,255
1986	755,734.57	378,472	314,471	441,264	31.40	14,053
1987	680,390.68	332,031	275,883	404,508	32.00	12,641
1988	1,207,291.65	576,965	479,398	727,894	32.23	22,584
1989	944,344.79	438,743	364,550	579,795	32.85	17,650
1990	1,295,367.63	587,838	488,432	806,936	33.10	24,379
1991	1,794,334.57	794,172	659,875	1,134,460	33.38	33,986
1992	1,691,246.65	724,530	602,009	1,089,238	34.02	32,018
1993	1,775,218.53	739,379	614,347	1,160,872	34.32	33,825
1994	1,694,476.37	684,907	569,087	1,125,389	34.64	32,488
1995	2,800,234.31	1,096,292	910,905	1,889,329	34.97	54,027
1996	2,623,270.07	992,645	824,785	1,798,485	35.32	50,920
1997	1,874,955.03	684,171	568,475	1,306,480	35.68	36,617
1998	1,650,437.20	582,604	484,084	1,166,353	35.75	32,625
1999	1,739,657.30	589,048	489,438	1,250,219	36.14	34,594
2000	1,531,470.81	495,890	412,033	1,119,438	36.55	30,628
2001	1,300,228.75	403,331	335,126	965,103	36.69	26,304
2002	1,982,423.84	586,797	487,567	1,494,857	36.86	40,555
2003	2,667,260.09	750,300	623,422	2,043,838	37.05	55,164
2004	3,117,650.49	829,295	689,058	2,428,592	37.26	65,180
2005	4,671,219.77	1,167,805	970,325	3,700,895	37.50	98,691
2006	3,756,309.30	881,230	732,211	3,024,098	37.52	80,600
2007	4,534,235.61	990,277	822,817	3,711,419	37.58	98,760
2008	4,762,362.18	959,140	796,946	3,965,416	37.67	105,267
2009	4,538,830.21	836,960	695,427	3,843,403	37.59	102,245
2010	4,668,963.47	780,651	648,640	4,020,323	37.35	107,639
2011	5,950,453.52	885,427	735,698	5,214,756	37.17	140,295

PENNSYLVANIA POWER COMPANY

ACCOUNT 365 OVERHEAD CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R1						
NET SALVAGE PERCENT.. 0						
2012	5,355,718.35	695,172	577,616	4,778,102	36.87	129,593
2013	4,884,329.88	538,253	447,232	4,437,098	36.32	122,167
2014	5,897,161.35	528,386	439,034	5,458,127	35.56	153,491
2015	6,956,329.36	469,552	390,149	6,566,180	34.54	190,104
2016	12,195,743.16	536,613	445,870	11,749,873	32.63	360,094
2017	14,394,613.14	251,906	209,308	14,185,305	28.07	505,355
	129,163,441.64	30,411,489	25,268,796	103,894,646		3,095,204
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					33.6	2.40

PENNSYLVANIA POWER COMPANY

ACCOUNT 365.1 OVERHEAD CONDUCTORS AND DEVICES - CLEARING AND GRADING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R1						
NET SALVAGE PERCENT.. 0						
2004	149,196.07	39,686	40,786	108,410	37.26	2,910
2007	1,124,793.26	245,655	252,466	872,327	37.58	23,213
2008	11,514,810.25	2,319,083	2,383,385	9,131,425	37.67	242,406
2009	2,680,789.05	494,338	508,045	2,172,744	37.59	57,801
2010	6,827,436.70	1,141,547	1,173,199	5,654,238	37.35	151,385
2011	3,990,494.35	593,786	610,250	3,380,244	37.17	90,940
2012	434,935.88	56,455	58,020	376,916	36.87	10,223
2013	11,750,658.82	1,294,923	1,330,828	10,419,831	36.32	286,890
2014	5,630,964.89	504,534	518,523	5,112,442	35.56	143,769
2015	4,487,367.85	302,897	311,296	4,176,072	34.54	120,905
	48,591,447.12	6,992,904	7,186,798	41,404,649		1,130,442
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						36.6 2.33

PENNSYLVANIA POWER COMPANY

ACCOUNT 366 UNDERGROUND CONDUIT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R2.5						
NET SALVAGE PERCENT.. 0						
1924	1,022.37	975	939	83	4.54	18
1927	15,915.95	15,123	14,563	1,353	4.74	285
1930	1,124.35	1,053	1,014	110	5.96	18
1938	108.26	99	95	13	7.46	2
1940	16,000.76	14,509	13,972	2,029	7.97	255
1942	412.51	371	357	56	8.54	7
1948	394.43	345	332	62	9.87	6
1949	435.54	379	365	71	10.24	7
1955	30.73	26	25	6	12.13	
1956	1,232.34	1,023	985	247	12.58	20
1957	14,743.57	12,131	11,682	3,062	13.03	235
1958	2,429.36	1,980	1,907	522	13.49	39
1959	825.27	666	641	184	13.96	13
1960	20.45	16	15	5	13.93	
1965	24,687.96	18,792	18,096	6,592	16.47	400
1966	8,366.36	6,291	6,058	2,308	16.99	136
1967	25,021.37	18,576	17,888	7,133	17.52	407
1968	12,316.79	9,023	8,689	3,628	18.07	201
1969	12,180.85	8,802	8,476	3,705	18.62	199
1970	99,438.63	70,850	68,227	31,212	19.17	1,628
1971	70,382.12	49,746	47,904	22,478	19.29	1,165
1972	20,979.83	14,606	14,065	6,915	19.86	348
1973	56,574.83	38,771	37,336	19,239	20.44	941
1974	178,533.30	120,367	115,911	62,622	21.02	2,979
1975	81,892.99	54,295	52,285	29,608	21.60	1,371
1976	27,731.83	18,070	17,401	10,331	22.19	466
1977	6,898.81	4,415	4,252	2,647	22.79	116
1978	34,333.33	21,561	20,763	13,570	23.40	580
1979	39,133.44	24,106	23,214	15,919	24.00	663
1980	18,010.62	10,875	10,472	7,539	24.61	306
1981	27,509.70	16,266	15,664	11,846	25.23	470
1982	30,758.44	17,797	17,138	13,620	25.85	527
1983	22,689.09	12,837	12,362	10,327	26.48	390
1984	17,014.97	9,406	9,058	7,957	27.10	294
1985	21,184.89	11,429	11,006	10,179	27.74	367
1986	52,411.24	27,568	26,547	25,864	28.38	911
1987	22,244.67	11,398	10,976	11,269	29.02	388
1988	48,328.83	24,097	23,205	25,124	29.67	847
1989	47,125.18	22,832	21,987	25,138	30.32	829
1990	58,533.34	27,522	26,503	32,030	30.98	1,034
1991	57,670.21	26,286	25,313	32,357	31.64	1,023
1992	82,820.40	36,540	35,187	47,633	32.30	1,475

PENNSYLVANIA POWER COMPANY

ACCOUNT 366 UNDERGROUND CONDUIT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R2.5						
NET SALVAGE PERCENT.. 0						
1993	82,162.39	35,026	33,729	48,433	32.97	1,469
1994	519,476.96	214,856	206,902	312,575	33.32	9,381
1995	614,690.91	244,770	235,709	378,982	34.00	11,147
1996	848,002.69	324,531	312,517	535,486	34.68	15,441
1997	486,079.23	178,391	171,787	314,292	35.36	8,888
1998	501,731.60	176,108	169,589	332,143	36.06	9,211
1999	456,857.26	152,956	147,294	309,563	36.75	8,423
2000	159,589.56	50,829	48,947	110,643	37.45	2,954
2001	147,678.94	44,599	42,948	104,731	38.14	2,746
2002	131,227.42	37,426	36,040	95,187	38.85	2,450
2003	290,813.29	78,432	75,528	215,285	39.26	5,484
2004	192,400.31	48,562	46,764	145,636	39.98	3,643
2005	178,371.51	41,917	40,365	138,007	40.69	3,392
2006	199,183.72	43,303	41,700	157,484	41.41	3,803
2007	102,987.22	20,659	19,894	83,093	41.85	1,985
2008	176,951.17	32,276	31,081	145,870	42.58	3,426
2009	86,162.91	14,208	13,682	72,481	43.05	1,684
2010	83,084.01	12,147	11,697	71,387	43.78	1,631
2011	196,602.58	25,165	24,234	172,369	44.26	3,894
2012	119,332.89	13,055	12,572	106,761	44.75	2,386
2013	418,569.94	38,048	36,640	381,930	45.00	8,487
2014	187,490.96	13,387	12,892	174,599	45.52	3,836
2015	134,954.92	7,018	6,758	128,197	45.58	2,813
2016	65,848.20	2,107	2,029	63,819	45.45	1,404
2017	59,565.37	673	648	58,917	43.75	1,347
	7,699,285.87	2,632,269	2,534,821	5,164,465		142,691

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 36.2 1.85

PENNSYLVANIA POWER COMPANY

ACCOUNT 367 UNDERGROUND CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R2.5						
NET SALVAGE PERCENT.. 0						
1967	12,242.40	10,078	10,060	2,182	10.85	201
1968	30,120.42	24,602	24,557	5,563	11.10	501
1969	19,625.96	15,897	15,868	3,758	11.38	330
1970	121,649.28	97,076	96,898	24,751	12.02	2,059
1971	152,699.68	120,709	120,488	32,212	12.32	2,615
1972	225,963.76	175,800	175,478	50,486	12.98	3,890
1973	197,602.21	152,114	151,835	45,767	13.31	3,439
1974	165,639.63	126,085	125,854	39,786	13.65	2,915
1975	277,007.85	207,202	206,822	70,186	14.32	4,901
1976	155,040.62	114,529	114,319	40,722	14.68	2,774
1977	82,880.52	60,088	59,978	22,903	15.36	1,491
1978	156,222.82	111,699	111,494	44,729	15.75	2,840
1979	260,763.60	182,717	182,382	78,382	16.45	4,765
1980	307,289.07	212,029	211,640	95,649	16.85	5,676
1981	410,987.99	277,499	276,990	133,998	17.56	7,631
1982	241,684.25	160,430	160,136	81,548	17.98	4,535
1983	314,120.94	203,739	203,365	110,756	18.69	5,926
1984	449,474.32	286,090	285,565	163,909	19.13	8,568
1985	391,702.83	243,169	242,723	148,980	19.85	7,505
1986	738,097.11	448,763	447,940	290,157	20.31	14,286
1987	699,819.75	414,083	413,324	286,496	21.05	13,610
1988	1,264,982.74	731,413	730,072	534,911	21.52	24,856
1989	853,099.05	478,930	478,052	375,047	22.26	16,848
1990	1,206,894.02	660,412	659,201	547,693	22.75	24,074
1991	1,217,303.53	645,171	643,988	573,316	23.50	24,396
1992	1,588,056.89	818,008	816,508	771,549	24.00	32,148
1993	2,046,343.41	1,017,851	1,015,984	1,030,359	24.76	41,614
1994	3,456,241.37	1,665,217	1,662,163	1,794,078	25.28	70,968
1995	1,193,591.28	553,230	552,215	641,376	26.04	24,630
1996	1,392,239.54	622,610	621,468	770,772	26.58	28,998
1997	2,057,593.99	881,473	879,856	1,177,738	27.35	43,062
1998	2,868,985.04	1,180,300	1,178,135	1,690,850	27.90	60,604
1999	5,865,962.23	2,300,630	2,296,411	3,569,551	28.67	124,505
2000	1,326,010.30	496,591	495,680	830,330	29.23	28,407
2001	1,243,806.46	441,303	440,494	803,312	30.01	26,768
2002	1,513,362.53	509,095	508,161	1,005,202	30.58	32,871
2003	1,868,932.55	593,573	592,484	1,276,449	31.16	40,964
2004	1,556,116.13	462,166	461,319	1,094,797	31.95	34,266
2005	2,175,799.35	603,784	602,677	1,573,122	32.55	48,329
2006	1,812,115.35	466,801	465,945	1,346,170	33.14	40,621
2007	1,069,951.62	253,900	253,434	816,518	33.75	24,193
2008	1,046,683.97	225,665	225,251	821,433	34.56	23,768

PENNSYLVANIA POWER COMPANY

ACCOUNT 367 UNDERGROUND CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R2.5						
NET SALVAGE PERCENT.. 0						
2009	1,600,929.90	311,541	310,970	1,289,960	35.17	36,678
2010	1,054,738.37	183,524	183,187	871,551	35.60	24,482
2011	2,605,821.09	396,345	395,618	2,210,203	36.24	60,988
2012	2,774,446.52	360,123	359,463	2,414,984	36.87	65,500
2013	2,841,465.48	305,742	305,181	2,536,284	37.34	67,924
2014	2,460,651.98	209,155	208,772	2,251,880	37.65	59,811
2015	3,531,360.27	218,238	217,838	3,313,522	37.98	87,244
2016	4,785,042.83	182,310	181,975	4,603,068	37.87	121,549
2017	5,307,558.36	71,121	70,991	5,236,567	36.68	142,764
	70,996,721.16	21,490,620	21,451,209	49,545,512		1,584,288
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						31.3 2.23

PENNSYLVANIA POWER COMPANY

ACCOUNT 368 LINE TRANSFORMERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 44-R1.5						
NET SALVAGE PERCENT.. 0						
1929	3,146.95	3,147	3,147			
1930	2,959.68	2,952	2,857	103	0.22	103
1931	1,989.18	1,979	1,916	73	0.45	73
1932	675.00	669	648	27	0.71	27
1933	1,315.91	1,301	1,259	57	0.97	57
1934	1,308.52	1,289	1,248	61	1.25	49
1935	1,249.95	1,217	1,178	72	2.25	32
1936	55.73	54	52	4	2.54	2
1937	158.98	154	149	10	2.83	4
1938	139.16	134	130	9	3.14	3
1939	100.78	97	94	7	2.80	2
1940	7.51	7	7	1	3.15	
1941	5.08	5	5			
1942	2,531.99	2,409	2,332	200	3.87	52
1943	938.16	895	866	72	3.62	20
1944	1,006.77	955	924	83	4.02	21
1945	9,279.70	8,746	8,466	814	4.42	184
1946	3,968.23	3,717	3,598	370	4.84	76
1948	9,550.41	8,894	8,609	941	5.13	183
1949	216.51	200	194	23	5.57	4
1950	70.91	66	64	7	5.49	1
1951	1,689.83	1,551	1,501	189	5.96	32
1952	3,197.14	2,932	2,838	359	5.93	61
1953	7,262.78	6,605	6,393	870	6.43	135
1955	136.30	123	119	17	6.94	2
1956	2,828.56	2,540	2,459	370	6.99	53
1957	85,132.07	75,716	73,290	11,842	7.52	1,575
1958	106,036.76	94,012	90,999	15,038	7.61	1,976
1959	168,384.86	148,751	143,984	24,401	7.72	3,161
1960	125,814.17	109,962	106,438	19,376	8.29	2,337
1961	124,049.77	107,936	104,477	19,573	8.44	2,319
1962	105,123.43	91,016	88,099	17,024	8.60	1,980
1963	125,331.40	107,234	103,798	21,533	9.20	2,341
1964	116,793.86	99,345	96,161	20,633	9.40	2,195
1965	101,353.73	85,664	82,919	18,435	9.61	1,918
1966	161,326.90	134,595	130,282	31,045	10.23	3,035
1967	364,456.93	301,843	292,170	72,287	10.48	6,898
1968	244,381.01	200,808	194,373	50,008	10.74	4,656
1969	254,487.03	207,356	200,711	53,776	11.02	4,880
1970	265,143.32	214,103	207,242	57,901	11.32	5,115
1971	322,257.97	257,742	249,482	72,776	11.64	6,252
1972	394,263.67	312,139	302,136	92,128	11.97	7,697

PENNSYLVANIA POWER COMPANY

ACCOUNT 368 LINE TRANSFORMERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 44-R1.5						
NET SALVAGE PERCENT.. 0						
1973	370,351.98	288,430	279,187	91,165	12.64	7,212
1974	444,611.37	342,351	331,380	113,231	12.99	8,717
1975	385,738.38	293,470	284,065	101,673	13.36	7,610
1976	494,517.55	371,482	359,578	134,940	13.75	9,814
1977	650,512.03	482,160	466,709	183,803	14.14	12,999
1978	805,450.63	588,623	569,760	235,691	14.55	16,199
1979	1,092,808.34	786,822	761,608	331,200	14.97	22,124
1980	927,774.23	657,606	636,532	291,242	15.41	18,900
1981	815,271.57	568,407	550,192	265,080	15.85	16,724
1982	961,512.55	658,828	637,715	323,798	16.31	19,853
1983	901,933.08	606,821	587,375	314,558	16.78	18,746
1984	1,156,174.02	763,075	738,622	417,552	17.26	24,192
1985	994,346.56	643,143	622,533	371,814	17.75	20,947
1986	1,543,927.38	982,401	950,919	593,008	18.00	32,945
1987	1,376,176.17	856,257	828,817	547,359	18.52	29,555
1988	1,596,042.96	969,915	938,833	657,210	19.04	34,517
1989	1,342,467.03	795,814	770,311	572,156	19.58	29,221
1990	2,086,822.68	1,205,140	1,166,520	920,303	20.12	45,741
1991	1,545,655.40	872,368	844,412	701,243	20.45	34,291
1992	2,129,236.98	1,167,248	1,129,843	999,394	21.01	47,568
1993	2,235,742.26	1,188,521	1,150,434	1,085,308	21.59	50,269
1994	1,674,233.64	865,579	837,841	836,393	21.95	38,104
1995	1,635,542.88	816,954	790,774	844,769	22.55	37,462
1996	1,466,730.78	709,604	686,864	779,867	22.94	33,996
1997	1,238,448.45	578,851	560,301	678,147	23.36	29,030
1998	1,741,093.72	780,881	755,857	985,237	23.98	41,086
1999	1,237,375.92	533,309	516,219	721,157	24.42	29,531
2000	885,046.03	365,524	353,810	531,236	24.87	21,361
2001	1,033,798.11	407,730	394,664	639,134	25.34	25,222
2002	1,138,626.34	427,099	413,412	725,214	25.82	28,087
2003	2,982,227.53	1,063,761	1,029,672	1,952,556	26.15	74,668
2004	5,125,913.24	1,723,332	1,668,106	3,457,807	26.66	129,700
2005	5,502,043.83	1,739,746	1,683,994	3,818,050	27.03	141,252
2006	4,913,899.87	1,452,549	1,406,001	3,507,899	27.41	127,979
2007	5,991,953.20	1,641,795	1,589,182	4,402,771	27.82	158,259
2008	5,590,500.18	1,412,719	1,367,447	4,223,053	28.09	150,340
2009	5,253,649.45	1,210,441	1,171,651	4,081,998	28.40	143,732
2010	5,875,003.84	1,220,826	1,181,704	4,693,300	28.60	164,101
2011	5,708,121.55	1,050,294	1,016,637	4,691,485	28.83	162,729
2012	3,839,580.52	612,413	592,788	3,246,793	28.98	112,036
2013	3,599,824.61	484,536	469,009	3,130,816	28.94	108,183
2014	4,125,572.77	447,625	433,280	3,692,293	28.76	128,383

PENNSYLVANIA POWER COMPANY

ACCOUNT 368 LINE TRANSFORMERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 44-R1.5						
NET SALVAGE PERCENT.. 0						
2015	4,357,458.43	352,954	341,643	4,015,815	28.36	141,601
2016	5,435,715.61	282,114	273,073	5,162,643	27.40	188,418
2017	5,408,622.98	108,172	104,706	5,303,917	24.56	215,958
	112,738,183.23	37,978,550	36,761,594	75,976,589		2,998,873
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						25.3 2.66

PENNSYLVANIA POWER COMPANY

ACCOUNT 369 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R4						
NET SALVAGE PERCENT.. 0						
1942	120.32	118	120			
1943	52.74	51	53			
1944	137.28	133	137			
1945	205.71	198	206			
1946	6,045.87	5,835	6,046			
1947	15,614.62	14,971	15,615			
1948	19,938.53	19,123	19,939			
1949	23,361.57	22,245	23,362			
1950	31,853.78	30,318	31,854			
1951	33,533.24	31,665	33,533			
1952	44,190.80	41,389	44,191			
1953	48,182.98	45,061	48,183			
1954	47,132.07	43,993	47,132			
1955	53,947.56	49,901	53,948			
1956	68,730.79	63,404	68,731			
1957	70,657.38	64,553	70,657			
1958	60,205.21	54,811	60,205			
1959	62,344.46	56,166	62,344			
1960	53,735.69	48,201	53,736			
1961	54,200.22	48,385	54,200			
1962	109,082.79	96,255	109,083			
1963	60,896.42	53,102	60,896			
1964	61,225.40	53,064	61,225			
1965	67,564.38	57,822	67,564			
1966	80,847.67	68,704	80,848			
1967	86,104.89	72,182	86,105			
1968	104,984.79	86,780	104,985			
1969	99,524.20	81,092	99,524			
1970	117,878.86	94,633	117,879			
1971	155,845.98	123,929	155,846			
1972	241,176.84	188,745	241,177			
1973	309,925.62	238,581	309,926			
1974	321,578.68	243,403	321,579			
1975	262,308.12	195,105	262,308			
1976	209,608.65	153,098	206,418	3,191	15.32	208
1977	221,081.89	158,471	213,662	7,420	16.00	464
1978	299,110.06	210,304	283,548	15,562	16.68	933
1979	304,289.63	209,716	282,755	21,535	17.36	1,240
1980	321,476.06	216,996	292,570	28,906	18.06	1,601
1981	357,424.17	236,114	318,346	39,078	18.75	2,084
1982	360,609.04	232,990	314,134	46,475	19.45	2,389
1983	417,704.73	262,277	353,621	64,084	20.45	3,134

PENNSYLVANIA POWER COMPANY

ACCOUNT 369 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R4						
NET SALVAGE PERCENT.. 0						
1984	459,070.88	281,410	379,418	79,653	21.15	3,766
1985	482,798.57	288,714	389,266	93,533	21.85	4,281
1986	671,771.53	391,508	527,860	143,912	22.55	6,382
1987	741,085.76	418,121	563,742	177,344	23.56	7,527
1988	1,108,180.82	608,059	819,830	288,351	24.26	11,886
1989	1,051,163.73	560,270	755,398	295,766	24.97	11,845
1990	1,483,052.22	762,585	1,028,174	454,878	25.98	17,509
1991	931,709.73	464,178	625,839	305,871	26.69	11,460
1992	891,872.45	427,564	576,474	315,398	27.69	11,390
1993	1,054,306.22	488,144	658,152	396,154	28.41	13,944
1994	1,832,836.02	814,146	1,097,692	735,144	29.41	24,996
1995	2,106,921.40	900,709	1,214,403	892,518	30.13	29,622
1996	2,178,740.10	890,015	1,199,985	978,755	31.13	31,441
1997	828,634.12	322,753	435,160	393,474	32.13	12,246
1998	239,096.57	89,040	120,050	119,047	32.86	3,623
1999	3,184,455.90	1,125,387	1,517,331	1,667,125	33.85	49,250
2000	134,009.97	44,786	60,384	73,626	34.86	2,112
2001	216,175.70	68,139	91,870	124,306	35.85	3,467
2002	223,712.82	66,577	89,764	133,949	36.58	3,662
2003	478,323.58	133,165	179,543	298,781	37.58	7,951
2004	821,401.80	212,907	287,057	534,345	38.58	13,850
2005	934,742.24	224,338	302,469	632,273	39.58	15,975
2006	1,597,108.74	352,642	475,458	1,121,651	40.58	27,640
2007	964,945.74	194,533	262,284	702,662	41.58	16,899
2008	809,214.12	148,410	200,097	609,117	42.31	14,397
2009	1,019,957.11	167,273	225,530	794,427	43.32	18,339
2010	888,862.63	128,707	173,532	715,331	44.31	16,144
2011	1,239,904.53	155,484	209,635	1,030,270	45.32	22,733
2012	1,083,287.35	115,045	155,113	928,174	46.31	20,043
2013	739,446.07	64,184	86,538	652,908	47.32	13,798
2014	1,170,221.84	79,107	106,658	1,063,564	48.31	22,015
2015	1,042,756.56	50,261	67,766	974,991	49.32	19,769
2016	862,248.20	25,005	33,713	828,535	50.31	16,469
2017	723,387.59	7,017	9,461	713,927	51.05	13,985
	39,459,842.30	15,044,067	19,963,837	19,496,005		532,469

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 36.6 1.35

PENNSYLVANIA POWER COMPANY

ACCOUNT 370.1 METERS - SMART GRID

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 15-S0.5						
NET SALVAGE PERCENT.. 0						
2008	2,124.43	1,249	1,245	879	6.66	132
2010	170,669.27	86,017	85,749	84,920	7.38	11,507
2013	439,862.11	151,620	151,148	288,714	8.55	33,768
2014	5,724,882.12	1,608,692	1,603,688	4,121,194	8.95	460,469
2015	21,159,288.73	4,460,378	4,446,504	16,712,785	9.36	1,785,554
2016	8,678,506.63	1,154,241	1,150,651	7,527,856	9.77	770,507
2017	2,528,538.17	118,841	118,471	2,410,067	10.13	237,914
	38,703,871.46	7,581,038	7,557,456	31,146,415		3,299,851
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						9.4 8.53

PENNSYLVANIA POWER COMPANY

ACCOUNT 371 INSTALLATIONS ON CUSTOMERS' PREMISES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 33-R2						
NET SALVAGE PERCENT.. 0						
1985	46,710.65	37,042	42,637	4,074	8.48	480
1986	137,608.86	107,060	123,232	14,377	8.99	1,599
1987	351,217.02	268,892	309,509	41,708	9.34	4,466
1988	198,820.13	148,976	171,479	27,341	9.87	2,770
1989	257,900.73	189,634	218,279	39,622	10.26	3,862
1990	381,535.43	274,896	316,420	65,115	10.67	6,103
1991	431,952.74	303,317	349,134	82,819	11.24	7,368
1992	325,746.63	223,462	257,216	68,531	11.67	5,872
1993	315,393.33	210,935	242,797	72,596	12.13	5,985
1994	58,013.55	37,628	43,312	14,702	12.73	1,155
1995	41,904.60	26,400	30,388	11,517	13.21	872
1996	96,339.56	58,825	67,711	28,629	13.71	2,088
1997	59,152.71	34,924	40,199	18,954	14.22	1,333
1998	65,869.53	37,374	43,019	22,851	14.87	1,537
1999	34,458.97	18,808	21,649	12,810	15.40	832
2000	41,670.97	21,802	25,095	16,576	15.95	1,039
2001	19,361.16	9,681	11,143	8,218	16.50	498
2002	24,464.01	11,679	13,443	11,021	16.97	649
2003	48,692.20	22,028	25,355	23,337	17.55	1,330
2004	75,572.36	32,239	37,109	38,463	18.15	2,119
2005	84,701.41	33,982	39,115	45,586	18.65	2,444
2006	122,670.44	45,854	52,781	69,889	19.27	3,627
2007	48,817.26	16,915	19,470	29,347	19.80	1,482
2008	52,253.51	16,627	19,139	33,115	20.35	1,627
2009	35,007.31	10,117	11,645	23,362	20.91	1,117
2010	82,292.82	21,355	24,581	57,712	21.40	2,697
2011	103,461.02	23,672	27,248	76,213	21.91	3,478
2012	69,340.79	13,688	15,755	53,586	22.36	2,397
2013	85,624.63	14,145	16,282	69,343	22.75	3,048
2014	41,195.48	5,421	6,240	34,955	23.10	1,513
2015	54,987.78	5,334	6,139	48,849	23.27	2,099
	3,792,737.59	2,282,712	2,627,521	1,165,217		77,486

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 15.0 2.04

PENNSYLVANIA POWER COMPANY

ACCOUNT 373.1 STREET LIGHTING AND SIGNAL SYSTEMS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 27-R2						
NET SALVAGE PERCENT.. 0						
1927	1,954.45	1,954	1,954			
1928	3,237.42	3,237	3,237			
1929	591.35	591	591			
1930	1,940.87	1,941	1,941			
1931	1,038.66	1,039	1,039			
1935	125.85	126	126			
1937	1,713.65	1,714	1,714			
1939	347.04	347	347			
1940	822.26	822	822			
1948	3,261.99	3,262	3,262			
1953	781.15	781	781			
1954	4,301.19	4,301	4,301			
1955	1,119.33	1,119	1,119			
1958	953.91	954	954			
1959	24.04	24	24			
1960	362.19	362	362			
1961	2,104.72	2,105	2,105			
1962	4,532.90	4,533	4,533			
1963	5,492.94	5,493	5,493			
1964	8,230.26	8,230	8,230			
1965	20,714.38	20,714	20,714			
1966	21,412.32	21,412	21,412			
1967	41,279.55	41,280	41,280			
1968	2,889.89	2,890	2,890			
1969	4,206.76	4,182	4,207			
1970	60,749.18	60,020	60,749			
1971	18,746.93	18,394	18,747			
1972	7,941.72	7,733	7,942			
1973	4,557.12	4,421	4,557			
1974	34,775.15	33,433	34,775			
1975	55,796.52	53,353	55,797			
1976	11,308.10	10,700	11,308			
1977	12,573.98	11,815	12,574			
1978	6,919.14	6,450	6,919			
1979	62,509.86	57,759	62,510			
1980	40,164.16	36,903	40,164			
1981	4,876.48	4,432	4,862	14	3.66	4
1982	44,790.43	40,388	44,308	482	3.87	125
1983	12,412.53	11,048	12,120	293	4.26	69
1984	45,020.08	39,663	43,513	1,507	4.52	333
1985	107,626.89	93,743	102,843	4,784	4.81	995
1986	56,507.89	48,597	53,314	3,194	5.13	623

PENNSYLVANIA POWER COMPANY

ACCOUNT 373.1 STREET LIGHTING AND SIGNAL SYSTEMS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 27-R2						
NET SALVAGE PERCENT.. 0						
1987	69,907.93	59,275	65,029	4,879	5.47	892
1988	29,064.36	24,263	26,618	2,446	5.84	419
1989	209,530.59	171,983	188,677	20,854	6.22	3,353
1990	369,124.36	297,440	326,312	42,812	6.63	6,457
1991	408,401.37	323,617	355,031	53,370	6.94	7,690
1992	380,899.97	295,274	323,936	56,964	7.39	7,708
1993	395,340.37	299,273	328,323	67,017	7.86	8,526
1994	302,574.83	223,270	244,943	57,632	8.35	6,902
1995	215,956.42	155,489	170,582	45,374	8.75	5,186
1996	183,766.68	128,416	140,881	42,886	9.27	4,626
1997	122,995.38	83,465	91,567	31,428	9.71	3,237
1998	107,888.83	70,689	77,551	30,338	10.26	2,957
1999	57,465.52	36,358	39,887	17,579	10.74	1,637
2000	53,599.32	32,546	35,705	17,894	11.32	1,581
2001	168,502.46	98,136	107,662	60,840	11.83	5,143
2002	91,792.87	51,074	56,032	35,761	12.36	2,893
2003	314,910.09	166,650	182,827	132,083	12.90	10,239
2004	232,934.02	116,653	127,977	104,957	13.46	7,798
2005	303,977.23	143,234	157,138	146,839	14.03	10,466
2006	276,434.44	121,742	133,560	142,874	14.61	9,779
2007	177,011.87	72,486	79,522	97,490	15.14	6,439
2008	148,933.16	56,178	61,631	87,302	15.69	5,564
2009	159,077.63	54,627	59,930	99,148	16.25	6,101
2010	365,869.19	113,054	124,028	241,841	16.77	14,421
2011	654,501.21	178,679	196,023	458,478	17.31	26,486
2012	224,914.95	53,080	58,233	166,682	17.81	9,359
2013	305,393.14	60,346	66,204	239,189	18.28	13,085
2014	331,786.62	52,356	57,438	274,349	18.67	14,695
2015	217,838.61	25,313	27,770	190,069	19.01	9,998
2016	82,305.79	6,008	6,591	75,715	19.03	3,979
2017	72,686.84	1,948	2,137	70,550	18.16	3,885
	7,756,101.28	4,245,187	4,630,185	3,125,916		223,650

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 14.0 2.88

PENNSYLVANIA POWER COMPANY

ACCOUNT 373.2 STREET LIGHTING AND SIGNAL SYSTEMS - ESIP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 27-R2						
NET SALVAGE PERCENT.. 0						
2007	2,923.22	1,197	2,923			
2009	3,092.00	1,062	3,092			
2011	582.10	159	582			
2012	1,646.55	389	1,647			
2013	6,982.43	1,380	6,198	784	18.28	43
2014	4,477.95	707	3,176	1,302	18.67	70
2015	5,295.45	615	2,762	2,533	19.01	133
	24,999.70	5,509	20,380	4,620		246
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.8 0.98						

PENNSYLVANIA POWER COMPANY

ACCOUNT 390.1 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R2.5						
NET SALVAGE PERCENT.. 0						
1949	489.58	453	487	3	5.57	1
1950	462.45	425	457	5	6.03	1
1951	98,541.40	90,431	97,279	1,262	5.96	212
1952	3,977.50	3,621	3,895	82	6.45	13
1953	3,997.40	3,635	3,910	87	6.43	14
1954	345.37	311	335	10	6.92	1
1956	194,481.77	173,439	186,573	7,909	7.46	1,060
1957	345.75	308	331	15	7.52	2
1958	1,826.85	1,620	1,743	84	7.61	11
1959	385.49	338	364	21	8.17	3
1960	616,048.25	538,426	579,201	36,847	8.29	4,445
1961	819.67	713	767	53	8.44	6
1962	10,401.13	8,947	9,625	776	9.02	86
1963	18,291.51	15,650	16,835	1,457	9.20	158
1964	19,367.21	16,371	17,611	1,756	9.79	179
1965	12,307.94	10,339	11,122	1,186	10.00	119
1966	20,989.12	17,511	18,837	2,152	10.23	210
1967	6,177.34	5,085	5,470	707	10.85	65
1969	129,592.08	104,970	112,919	16,673	11.38	1,465
1970	1,710.72	1,365	1,468	243	12.02	20
1972	1,703.21	1,325	1,425	278	12.98	21
1973	1,575.69	1,213	1,305	271	13.31	20
1974	15,850.68	12,066	12,980	2,871	13.65	210
1975	10,280.25	7,690	8,272	2,008	14.32	140
1976	1,736.64	1,283	1,380	357	14.68	24
1977	5,158.74	3,740	4,023	1,136	15.36	74
1978	4,256.33	3,043	3,273	983	15.75	62
1979	5,510.00	3,861	4,153	1,357	16.45	82
1980	484,146.92	334,061	359,360	124,787	16.85	7,406
1981	3,620.69	2,445	2,630	991	17.56	56
1982	43,482.78	28,864	31,050	12,433	17.98	691
1984	41,615.34	26,488	28,494	13,121	19.13	686
1985	41,691.16	25,882	27,842	13,849	19.85	698
1986	8,125.55	4,940	5,314	2,812	20.31	138
1987	28,031.35	16,586	17,842	10,189	21.05	484
1988	7,858.44	4,544	4,888	2,970	21.52	138
1989	1,130.15	634	682	448	22.26	20
1990	32,637.69	17,859	19,211	13,427	22.75	590
1991	70,980.15	37,619	40,468	30,512	23.50	1,298
1992	700,036.39	360,589	387,897	312,139	24.00	13,006
1993	430,194.38	213,979	230,184	200,010	24.76	8,078
1994	10,544.91	5,081	5,466	5,079	25.28	201

PENNSYLVANIA POWER COMPANY

ACCOUNT 390.1 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R2.5						
NET SALVAGE PERCENT.. 0						
1995	211,474.72	98,019	105,442	106,033	26.04	4,072
2000	6,349.27	2,378	2,558	3,791	29.23	130
2003	1,303,677.95	414,048	445,404	858,274	31.16	27,544
2005	185,154.07	51,380	55,271	129,883	32.55	3,990
2006	148,535.99	38,263	41,161	107,375	33.14	3,240
2008	209,326.92	45,131	48,549	160,778	34.56	4,652
2010	78,275.08	13,620	14,651	63,624	35.60	1,787
2011	23,677.87	3,601	3,874	19,804	36.24	546
2012	18,280.57	2,373	2,553	15,728	36.87	427
2013	190,879.79	20,539	22,094	168,786	37.34	4,520
2014	81,934.78	6,964	7,491	74,444	37.65	1,977
2015	1,026.98	63	68	959	37.98	25
2016	602,889.88	22,970	24,710	578,180	37.87	15,267
2017	335.47	4	4	331	36.68	9
	6,152,545.31	2,827,103	3,041,198	3,111,347		110,380
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 28.2						1.79

PENNSYLVANIA POWER COMPANY

ACCOUNT 390.2 STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R2.5						
NET SALVAGE PERCENT.. 0						
2008	41,239.11	8,891	9,607	31,632	34.56	915
2015	60.04	4	4	56	37.98	1
	41,299.15	8,895	9,611	31,688		916
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					34.6	2.22

PENNSYLVANIA POWER COMPANY

ACCOUNT 391.1 OFFICE FURNITURE AND EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
1998	110,169.27	107,415	79,853	30,316	0.50	30,316
1999	15,464.75	14,305	10,634	4,831	1.50	3,221
2000	6,286.28	5,500	4,089	2,197	2.50	879
2001	2,584.00	2,132	1,585	999	3.50	285
2002	214.61	166	123	92	4.50	20
2004	9,120.21	6,156	4,577	4,543	6.50	699
2008	3,008.83	1,429	1,062	1,947	10.50	185
2009	1,198.60	509	378	821	11.50	71
2015	6.54	1	1	6	17.50	
	148,053.09	137,613	102,302	45,751		35,676
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						1.3 24.10

PENNSYLVANIA POWER COMPANY

ACCOUNT 391.2 DATA PROCESSING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 5-SQUARE						
NET SALVAGE PERCENT.. 0						
2013	38,837.53	34,954	21,303	17,535	0.50	17,535
2014	195,790.30	137,053	83,528	112,262	1.50	74,841
2015	112,354.88	56,177	34,237	78,118	2.50	31,247
	346,982.71	228,184	139,068	207,915		123,623
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 1.7						35.63

PENNSYLVANIA POWER COMPANY

ACCOUNT 391.25 DATA PROCESSING EQUIPMENT - SMART GRID

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 5-SQUARE						
NET SALVAGE PERCENT.. 0						
2013	5,570.72	5,014	5,152	419	0.50	419
2014	472,801.24	330,961	340,060	132,741	1.50	88,494
2015	2,004,244.56	1,002,122	1,029,674	974,571	2.50	389,828
2016	685,318.99	205,596	211,249	474,070	3.50	135,449
2017	204,071.25	20,407	20,968	183,103	4.50	40,690
	3,372,006.76	1,564,100	1,607,103	1,764,904		654,880
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 2.7						19.42

PENNSYLVANIA POWER COMPANY

ACCOUNT 392 TRANSPORTATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 10-L2						
NET SALVAGE PERCENT.. 0						
1963	1,534.08	1,534	1,534			
1971	1,311.61	1,312	1,312			
1977	4,867.15	4,867	4,867			
1980	9,527.95	9,528	9,528			
1981	6,200.00	6,200	6,200			
1983	14,623.92	14,624	14,624			
1994	13,412.00	12,985	12,875	537	0.77	537
1996	3,827.00	3,637	3,606	221	1.12	197
2010	194,531.10	130,725	129,621	64,910	3.66	17,735
2015	345,042.91	102,823	101,955	243,088	5.89	41,271
	594,877.72	288,235	286,122	308,756		59,740
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.2 10.04						

PENNSYLVANIA POWER COMPANY

ACCOUNT 393 STORES EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 30-SQUARE						
NET SALVAGE PERCENT.. 0						
1990	18,188.12	16,673	11,004	7,184	2.50	2,874
1991	56,017.99	49,482	32,657	23,361	3.50	6,675
1996	26,718.30	19,148	12,637	14,081	8.50	1,657
	100,924.41	85,303	56,298	44,626		11,206
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 4.0						11.10

PENNSYLVANIA POWER COMPANY

ACCOUNT 394 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE NET SALVAGE PERCENT.. 0						
1993	87,471.47	85,722	45,315	42,156	0.50	42,156
1994	38,655.26	36,336	19,208	19,447	1.50	12,965
1995	3,488.60	3,140	1,660	1,829	2.50	732
1996	18,168.72	15,625	8,260	9,909	3.50	2,831
1997	11,246.67	9,222	4,875	6,372	4.50	1,416
1998	58,850.59	45,903	24,265	34,586	5.50	6,288
1999	51,776.59	38,315	20,254	31,523	6.50	4,850
2005	296,211.09	148,106	78,293	217,918	12.50	17,433
2008	168,668.95	64,094	33,882	134,787	15.50	8,696
2009	79.57	27	14	66	16.50	4
2010	55,280.89	16,584	8,767	46,514	17.50	2,658
2011	7,431.35	1,932	1,021	6,410	18.50	346
2012	310,233.29	68,251	36,079	274,154	19.50	14,059
2013	385,593.78	69,407	36,690	348,904	20.50	17,020
2014	83,281.45	11,659	6,164	77,117	21.50	3,587
2015	24,598.40	2,460	1,300	23,298	22.50	1,035
	1,601,036.67	616,783	326,047	1,274,990		136,076
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						9.4 8.50

PENNSYLVANIA POWER COMPANY

ACCOUNT 395 LABORATORY EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2008	21,537.11	10,230	5,857	15,680	10.50	1,493
2009	1.82	1	1	1	11.50	
2015	31.95	4	2	30	17.50	2
	21,570.88	10,235	5,860	15,711		1,495
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						10.5 6.93

PENNSYLVANIA POWER COMPANY

ACCOUNT 396 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 18-S1.5						
NET SALVAGE PERCENT.. 0						
1992	3,620.00	3,296	3,408	212	2.51	84
2008	236,313.10	127,515	131,864	104,449	8.11	12,879
2009	126,250.06	62,671	64,808	61,442	8.62	7,128
2010	94,187.12	42,243	43,683	50,504	9.22	5,478
2015	665.05	109	113	552	12.70	43
	461,035.33	235,834	243,876	217,159		25,612
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						8.5 5.56

PENNSYLVANIA POWER COMPANY

ACCOUNT 397 COMMUNICATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2006	1,912.24	1,466	506	1,406	3.50	402
2008	116,125.35	73,546	25,409	90,716	5.50	16,494
2009	251,569.31	142,557	49,250	202,319	6.50	31,126
2010	99,246.05	49,623	17,144	82,102	7.50	10,947
2011	78.52	34	12	67	8.50	8
2012	8,288.02	3,039	1,050	7,238	9.50	762
2013	927,172.55	278,152	96,095	831,078	10.50	79,150
2014	5,086.63	1,187	410	4,677	11.50	407
2015	273,198.59	45,534	15,731	257,468	12.50	20,597
2016	281,826.95	28,183	9,736	272,091	13.50	20,155
2017	137,179.05	4,572	1,580	135,599	14.50	9,352
	2,101,683.26	627,893	216,923	1,884,760		189,400
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 10.0						9.01

PENNSYLVANIA POWER COMPANY

ACCOUNT 398 MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2017

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2011	7,594.65	2,468	1,026	6,569	13.50	487
2015	11.30	1		11	17.50	1
	7,605.95	2,469	1,026	6,580		488
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						13.5 6.42

**PART III. EXPERIENCED AND
ESTIMATED NET SALVAGE**

PENNSYLVANIA POWER COMPANY

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2013 TRANSACTION YEAR				
353.00	22,778.02	48,560.22		48,560.22-
355.00	17,762.85	3,252.85		3,252.85-
356.10	10,857.43	51.28		51.28-
362.00	378,579.47	520,665.89		520,665.89-
364.00	156,324.53	1,092,276.41	167.86	1,092,108.55-
365.00	965,517.67	1,227,445.37	80.32	1,227,365.05-
366.00	594.81	439.41		439.41-
367.00	278,037.65	408,750.48		408,750.48-
368.00	1,307,344.41	510,189.38		510,189.38-
369.00	18,254.94	149,726.71		149,726.71-
370.10	4,699.69	3,513.53		3,513.53-
371.00	58,293.63	17,617.70		17,617.70-
373.10	115,582.21	62,686.99		62,686.99-
373.20	51,905.75	23,946.56		23,946.56-
391.20	388,643.50	27,891.33		27,891.33-
	3,775,176.56	4,097,014.11	248.18	4,096,765.93-
2014 TRANSACTION YEAR				
352.10	190.25	1,549.65		1,549.65-
353.00	28,798.62	844.17		844.17-
355.00	308.11	22,084.12		22,084.12-
356.10		12,111.73		12,111.73-
362.00	538,426.00	166,530.97		166,530.97-
364.00	159,354.52	467,581.73	1,482.81	466,098.92-
365.00	1,370,126.05	970,948.36	31.81	970,916.55-
366.00	3,105.45	1,082.54		1,082.54-
367.00	176,190.79	187,384.00		187,384.00-
368.00	1,890,948.38	323,360.85		323,360.85-
369.00	13,365.68	97,706.45	1.41	97,705.04-
371.00	28,520.72	9,162.55		9,162.55-
373.10	105,153.54	35,346.79	233.82	35,112.97-
373.20	4,870.14	453.42		453.42-
390.10	12,177.50	13,712.56		13,712.56-
391.20	424,309.21			
	4,755,844.96	2,309,859.89	1,749.85	2,308,110.04-

PENNSYLVANIA POWER COMPANY

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2015 TRANSACTION YEAR				
352.10	1,591.55			
353.00	68,336.93			
355.00	970.26	2,167.61		2,167.61-
356.10		2,948.95		2,948.95-
362.00	421,926.04	1,316.45		1,316.45-
364.00	254,503.80	572,486.14		572,486.14-
365.00	1,030,532.87	686,375.24		686,375.24-
366.00	53.72	56.38		56.38-
367.00	83,335.52	40,435.35		40,435.35-
368.00	1,483,782.19	285,595.58		285,595.58-
369.00	259.05-	103,281.74		103,281.74-
370.10	109,977.39	6.31-		6.31
371.00	16,266.49	3,474.90		3,474.90-
373.10	115,314.15	75,696.03		75,696.03-
373.20	3,431.54			
391.20	399,131.13			
392.00	50,943.00		5,309.70	5,309.70
	4,039,837.53	1,773,828.06	5,309.70	1,768,518.36-
2016 TRANSACTION YEAR				
355.00	15,820.39	44,772.00		44,772.00-
362.00	196,654.31	98,327.00		98,327.00-
364.00	870,420.50	2,176,051.00	8,704.00	2,167,347.00-
365.00	1,226,872.05	1,006,035.00		1,006,035.00-
366.00	6,587.54	2,240.00		2,240.00-
367.00	479,172.74	531,882.00		531,882.00-
368.00	545,118.28	98,121.00		98,121.00-
369.00	86,226.06	172,452.00		172,452.00-
373.10	8,235.79	2,635.00		2,635.00-
390.10	60,288.99	6,029.00		6,029.00-
	3,495,396.65	4,138,544.00	8,704.00	4,129,840.00-

PENNSYLVANIA POWER COMPANY

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2017 TRANSACTION YEAR				
362.00	501,598.08	255,815.00		255,815.00-
364.00	1,049,931.56	2,624,829.00	10,499.00	2,614,330.00-
365.00	1,439,461.31	1,194,753.00		1,194,753.00-
366.00	5,956.54	2,085.00		2,085.00-
367.00	530,755.84	599,754.00		599,754.00-
368.00	540,862.30	118,990.00		118,990.00-
369.00	72,338.76	144,678.00		144,678.00-
373.10	7,268.68	3,344.00		3,344.00-
390.10	33.55	3.00		3.00-
	4,148,206.62	4,944,251.00	10,499.00	4,933,752.00-
TOTAL	20,214,462.32	17,263,497.06	26,510.73	17,236,986.33-

**PENNSYLVANIA POWER COMPANY
 ELECTRIC PLANT IN SERVICE
 AS OF DECEMBER 31, 2016**

ACCOUNT	ORIGINAL COST
(1)	(2)
INTANGIBLE PLANT	
303 MISCELLANEOUS INTANGIBLE PLANT	12,119,673.24
303.1 MISCELLANEOUS INTANGIBLE PLANT - SMART METER SOFTWARE	4,089,336.81
TOTAL INTANGIBLE PLANT	16,209,010.05
TRANSMISSION PLANT	
352.1 STRUCTURES AND IMPROVEMENTS	764,597.96
352.2 STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	195,215.93
353 STATION EQUIPMENT	6,417,733.78
354 TOWERS AND FIXTURES	7,576.09
355 POLES AND FIXTURES	2,825,552.87
356 OVERHEAD CONDUCTORS AND DEVICES	2,722,010.42
357 UNDERGROUND CONDUIT	64,653.86
358 UNDERGROUND CONDUCTORS AND DEVICES	36,071.32
359 ROADS AND TRAILS	6,324.44
TOTAL TRANSMISSION PLANT	13,039,736.67
DISTRIBUTION PLANT	
361.1 STRUCTURES AND IMPROVEMENTS	1,297,037.49
361.2 STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	448,648.71
362 STATION EQUIPMENT	52,509,889.64
364 POLES, TOWERS AND FIXTURES	110,824,665.61
365 OVERHEAD CONDUCTORS AND DEVICES	116,208,289.81
365.1 OVERHEAD CONDUCTORS AND DEVICES - CLEARING AND GRADING	48,591,447.12
366 UNDERGROUND CONDUIT	7,645,677.04
367 UNDERGROUND CONDUCTORS AND DEVICES	66,219,918.64
368 LINE TRANSFORMERS	107,870,422.55
369 SERVICES	38,808,793.47
370.1 METERS - SMART GRID	36,175,333.29
371 INSTALLATIONS ON CUSTOMERS' PREMISES	3,792,737.59
373.1 STREET LIGHTING AND SIGNAL SYSTEMS	7,690,683.12
373.2 STREET LIGHTING AND SIGNAL SYSTEMS - ESIP	24,999.70
TOTAL DISTRIBUTION PLANT	598,108,543.78
GENERAL PLANT	
390.1 STRUCTURES AND IMPROVEMENTS	6,152,243.39
390.2 STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	41,299.15
391.1 OFFICE FURNITURE AND EQUIPMENT	391,660.44

**PENNSYLVANIA POWER COMPANY
 ELECTRIC PLANT IN SERVICE
 AS OF DECEMBER 31, 2016**

<u>ACCOUNT</u>	<u>ORIGINAL COST</u>
(1)	(2)
391.2 DATA PROCESSING EQUIPMENT	1,157,387.31
391.25 DATA PROCESSING EQUIPMENT - SMART GRID	3,167,935.51
392 TRANSPORTATION EQUIPMENT	594,877.72
393 STORES EQUIPMENT	124,327.24
394 TOOLS, SHOP AND GARAGE EQUIPMENT	1,957,968.48
395 LABORATORY EQUIPMENT	29,574.06
396 POWER OPERATED EQUIPMENT	461,035.33
397 COMMUNICATION EQUIPMENT	2,123,962.23
398 MISCELLANEOUS EQUIPMENT	33,765.98
TOTAL GENERAL PLANT	16,236,036.84
TOTAL DEPRECIABLE ELECTRIC PLANT	643,593,327.34
NONDEPRECIABLE	
301 ORGANIZATION	22,833.53
302 FRANCHISES AND CONSENTS	68,665.97
350.1 LAND	2,089,804.27
350.2 EASEMENTS	8,430,107.46
360.1 LAND	578,456.76
360.2 EASEMENTS	5,802,870.46
374 DISTRIBUTION PLANT ARO	4,407.74
389.1 LAND	226,639.25
389.2 EASEMENTS	310.93
399.1 GENERAL PLANT ARO	32,875.01
TOTAL NONDEPRECIABLE PLANT	17,256,971.38
TOTAL ELECTRIC PLANT	660,850,298.72

**PENNSYLVANIA POWER COMPANY
 ELECTRIC PLANT IN SERVICE
 AS OF DECEMBER 31, 2017**

ACCOUNT	ORIGINAL COST
(1)	(2)
INTANGIBLE PLANT	
303 MISCELLANEOUS INTANGIBLE PLANT	12,799,670.45
303.1 MISCELLANEOUS INTANGIBLE PLANT - SMART METER SOFTWARE	6,083,518.89
TOTAL INTANGIBLE PLANT	18,883,189.34
TRANSMISSION PLANT	
352.1 STRUCTURES AND IMPROVEMENTS	764,597.96
352.2 STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	195,215.93
353 STATION EQUIPMENT	6,417,733.78
354 TOWERS AND FIXTURES	7,576.09
355 POLES AND FIXTURES	2,825,552.87
356 OVERHEAD CONDUCTORS AND DEVICES	2,722,010.42
357 UNDERGROUND CONDUIT	64,653.86
358 UNDERGROUND CONDUCTORS AND DEVICES	36,071.32
359 ROADS AND TRAILS	6,324.44
TOTAL TRANSMISSION PLANT	13,039,736.67
DISTRIBUTION PLANT	
361.1 STRUCTURES AND IMPROVEMENTS	1,343,102.62
361.2 STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	448,648.71
362 STATION EQUIPMENT	57,024,272.35
364 POLES, TOWERS AND FIXTURES	120,274,049.69
365 OVERHEAD CONDUCTORS AND DEVICES	129,163,441.64
365.1 OVERHEAD CONDUCTORS AND DEVICES - CLEARING AND GRADING	48,591,447.12
366 UNDERGROUND CONDUIT	7,699,285.87
367 UNDERGROUND CONDUCTORS AND DEVICES	70,996,721.16
368 LINE TRANSFORMERS	112,738,183.23
369 SERVICES	39,459,842.30
370.1 METERS - SMART GRID	38,703,871.46
371 INSTALLATIONS ON CUSTOMERS' PREMISES	3,792,737.59
373.1 STREET LIGHTING AND SIGNAL SYSTEMS	7,756,101.28
373.2 STREET LIGHTING AND SIGNAL SYSTEMS - ESIP	24,999.70
TOTAL DISTRIBUTION PLANT	638,016,704.72

**PENNSYLVANIA POWER COMPANY
 ELECTRIC PLANT IN SERVICE
 AS OF DECEMBER 31, 2017**

	ACCOUNT	ORIGINAL COST
	(1)	(2)
	GENERAL PLANT	
390.1	STRUCTURES AND IMPROVEMENTS	6,152,545.31
390.2	STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	41,299.15
391.1	OFFICE FURNITURE AND EQUIPMENT	148,053.09
391.2	DATA PROCESSING EQUIPMENT	346,982.71
391.25	DATA PROCESSING EQUIPMENT - SMART GRID	3,372,006.76
392	TRANSPORTATION EQUIPMENT	594,877.72
393	STORES EQUIPMENT	100,924.41
394	TOOLS, SHOP AND GARAGE EQUIPMENT	1,601,036.67
395	LABORATORY EQUIPMENT	21,570.88
396	POWER OPERATED EQUIPMENT	461,035.33
397	COMMUNICATION EQUIPMENT	2,101,683.26
398	MISCELLANEOUS EQUIPMENT	7,605.95
	TOTAL GENERAL PLANT	14,949,621.24
	TOTAL DEPRECIABLE ELECTRIC PLANT	684,889,251.97
	NONDEPRECIABLE	
301	ORGANIZATION	22,833.53
302	FRANCHISES AND CONSENTS	68,665.97
350.1	LAND	2,089,804.27
350.2	EASEMENTS	8,430,107.46
360.1	LAND	578,456.76
360.2	EASEMENTS	5,802,870.46
374	DISTRIBUTION PLANT ARO	4,407.74
389.1	LAND	226,639.25
389.2	EASEMENTS	310.93
399.1	GENERAL PLANT ARO	32,875.01
	TOTAL NONDEPRECIABLE PLANT	17,256,971.38
	TOTAL ELECTRIC PLANT	702,146,223.35

PENNSYLVANIA POWER COMPANY
 COMPARISON OF CALCULATED ACCRUED DEPRECIATION
 AND BOOK RESERVE AS OF DECEMBER 31, 2016

ACCOUNT (1)	CALCULATED ACCRUED DEPRECIATION (2)	BOOK DEPRECIATION RESERVE (3)
ELECTRIC PLANT		
INTANGIBLE PLANT		
303 MISCELLANEOUS INTANGIBLE PLANT	9,668,874	9,647,740
303.1 MISCELLANEOUS INTANGIBLE PLANT - SMART METER SOFTWARE	784,967	698,001
TOTAL INTANGIBLE PLANT	10,453,841	10,345,741
TRANSMISSION PLANT		
352.1 STRUCTURES AND IMPROVEMENTS	448,195	528,270
352.2 STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	89,225	105,041
353 STATION EQUIPMENT	3,274,912	4,689,714
354 TOWERS AND FIXTURES	6,634	7,529
355 POLES AND FIXTURES	849,752	892,544
356 OVERHEAD CONDUCTORS AND DEVICES	804,969	958,466
357 UNDERGROUND CONDUIT	52,725	54,742
358 UNDERGROUND CONDUCTORS AND DEVICES	28,996	29,751
359 ROADS AND TRAILS	4,690	5,119
TOTAL TRANSMISSION PLANT	5,560,098	7,271,176
DISTRIBUTION PLANT		
361.1 STRUCTURES AND IMPROVEMENTS	434,490	554,152
361.2 STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	157,991	202,121
362 STATION EQUIPMENT	15,945,851	14,463,798
364 POLES, TOWERS AND FIXTURES	36,020,368	32,854,720
365 OVERHEAD CONDUCTORS AND DEVICES	28,801,294	24,137,780
365.1 OVERHEAD CONDUCTORS AND DEVICES - CLEARING AND GRADING	6,047,603	6,001,167
366 UNDERGROUND CONDUIT	2,512,399	2,398,624
367 UNDERGROUND CONDUCTORS AND DEVICES	20,407,074	20,835,527
368 LINE TRANSFORMERS	35,914,308	34,173,620
369 SERVICES	14,409,674	19,527,568
370.1 METERS - SMART GRID	4,631,403	4,172,215
371 INSTALLATIONS ON CUSTOMERS' PREMISES	2,205,523	2,537,778
373.1 STREET LIGHTING AND SIGNAL SYSTEMS	4,047,440	4,354,501
373.2 STREET LIGHTING AND SIGNAL SYSTEMS - ESIP	4,529	12,276
TOTAL DISTRIBUTION PLANT	171,539,947	166,225,847
GENERAL PLANT		
390.1 STRUCTURES AND IMPROVEMENTS	2,724,768	2,924,083
390.2 STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	8,027	8,682
391.1 OFFICE FURNITURE AND EQUIPMENT	371,443	303,892
391.2 DATA PROCESSING EQUIPMENT	969,149	872,137
391.25 DATA PROCESSING EQUIPMENT - SMART GRID	910,106	973,710
392 TRANSPORTATION EQUIPMENT	240,017	219,487
393 STORES EQUIPMENT	105,333	69,790
394 TOOLS, SHOP AND GARAGE EQUIPMENT	908,012	518,553
395 LABORATORY EQUIPMENT	17,159	12,587
396 POWER OPERATED EQUIPMENT	214,765	216,813
397 COMMUNICATION EQUIPMENT	650,740	166,789
398 MISCELLANEOUS EQUIPMENT	28,250	25,331
TOTAL GENERAL PLANT	7,147,769	6,311,854
TOTAL DEPRECIABLE PLANT	194,701,655	190,154,618
NONDEPRECIABLE		
302 FRANCHISES AND CONSENTS	772	772
374 DISTRIBUTION PLANT ARO	2,352	2,352
399.1 GENERAL PLANT ARO	21,479	21,479
TOTAL NONDEPRECIABLE PLANT	24,603	24,603
TOTAL ELECTRIC PLANT	194,726,258	190,179,221

PENNSYLVANIA POWER COMPANY
COMPARISON OF CALCULATED ACCRUED DEPRECIATION
AND BOOK RESERVE AS OF DECEMBER 31, 2017

ACCOUNT (1)	CALCULATED ACCRUED DEPRECIATION (2)	BOOK DEPRECIATION RESERVE (3)
ELECTRIC PLANT		
INTANGIBLE PLANT		
303 MISCELLANEOUS INTANGIBLE PLANT	10,337,699	10,295,643
303.1 MISCELLANEOUS INTANGIBLE PLANT - SMART METER SOFTWARE	1,511,591	1,445,197
TOTAL INTANGIBLE PLANT	11,849,290	11,740,840
TRANSMISSION PLANT		
352.1 STRUCTURES AND IMPROVEMENTS	457,105	534,697
352.2 STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	92,131	107,676
353 STATION EQUIPMENT	3,356,948	4,752,220
354 TOWERS AND FIXTURES	6,676	7,534
355 POLES AND FIXTURES	892,468	966,727
356 OVERHEAD CONDUCTORS AND DEVICES	846,998	1,007,646
357 UNDERGROUND CONDUIT	53,369	55,751
358 UNDERGROUND CONDUCTORS AND DEVICES	29,232	30,368
359 ROADS AND TRAILS	4,738	5,196
TOTAL TRANSMISSION PLANT	5,739,665	7,467,815
DISTRIBUTION PLANT		
361.1 STRUCTURES AND IMPROVEMENTS	450,338	565,931
361.2 STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	164,662	208,312
362 STATION EQUIPMENT	16,831,195	15,342,464
364 POLES, TOWERS AND FIXTURES	37,479,436	32,651,158
365 OVERHEAD CONDUCTORS AND DEVICES	30,411,489	25,268,796
365.1 OVERHEAD CONDUCTORS AND DEVICES - CLEARING AND GRADING	6,992,904	7,186,798
366 UNDERGROUND CONDUIT	2,632,269	2,534,821
367 UNDERGROUND CONDUCTORS AND DEVICES	21,490,620	21,451,209
368 LINE TRANSFORMERS	37,978,550	36,761,594
369 SERVICES	15,044,067	19,963,837
370.1 METERS - SMART GRID	7,581,038	7,557,456
371 INSTALLATIONS ON CUSTOMERS' PREMISES	2,282,712	2,627,521
373.1 STREET LIGHTING AND SIGNAL SYSTEMS	4,245,187	4,630,185
373.2 STREET LIGHTING AND SIGNAL SYSTEMS - ESIP	5,509	20,380
TOTAL DISTRIBUTION PLANT	183,589,976	176,770,462
GENERAL PLANT		
390.1 STRUCTURES AND IMPROVEMENTS	2,827,103	3,041,198
390.2 STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	8,895	9,611
391.1 OFFICE FURNITURE AND EQUIPMENT	137,613	102,302
391.2 DATA PROCESSING EQUIPMENT	228,184	139,068
391.25 DATA PROCESSING EQUIPMENT - SMART GRID	1,564,100	1,607,103
392 TRANSPORTATION EQUIPMENT	288,235	286,122
393 STORES EQUIPMENT	85,303	56,298
394 TOOLS, SHOP AND GARAGE EQUIPMENT	616,783	326,047
395 LABORATORY EQUIPMENT	10,235	5,860
396 POWER OPERATED EQUIPMENT	235,834	243,876
397 COMMUNICATION EQUIPMENT	627,893	216,923
398 MISCELLANEOUS EQUIPMENT	2,469	1,026
TOTAL GENERAL PLANT	6,632,647	6,035,434
TOTAL DEPRECIABLE PLANT	207,811,578	202,014,551
NONDEPRECIABLE		
302 FRANCHISES AND CONSENTS	772	772
374 DISTRIBUTION PLANT ARO	2,352	2,352
399.1 GENERAL PLANT ARO	21,479	21,479
TOTAL NONDEPRECIABLE PLANT	24,603	24,603
TOTAL ELECTRIC PLANT	207,836,181	202,039,154

PENNSYLVANIA 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 Penn Power Exhibit JJS-6 Attachment A that provides Pennsylvania Power Company's plant in service as of December 31, 2016 based on actual plant balances as of December 31, 2015 as adjusted for 12 months of projected additions, retirements and adjustments.

See Penn Power Exhibit JJS-6 Attachment B that provides Pennsylvania Power Company's reserves as of December 31, 2016 based on actual reserves as of December 31, 2015, as adjusted for 12 months of projected depreciation provisions, retirements and adjustments.

See Penn Power Exhibit JJS-6 Attachment C that provides Pennsylvania Power Company's plant in service as of December 31, 2017 based on projected plant balances as of December 31, 2016 as adjusted for 12 months of projected additions, retirements and adjustments.

See Penn Power Exhibit JJS-6 Attachment D that provides Pennsylvania Power Company's reserves as of December 31, 2017 based on actual reserves as of December 31, 2016, as adjusted for 12 months of projected depreciation provisions, retirements and adjustments.

Projected additions are based on Pennsylvania Power Company's capital budget forecast for 2016 and 2017. Capital Additions are identified by FERC plant account based on projects expected to be placed in service during the future and fully projected test periods and retirements are estimated based on historical experience.

Projected depreciation provisions are based on projected plant balances and projected capital additions during the future and fully projected future test periods.

PENNSYLVANIA POWER COMPANY
 SUMMARY OF PLANT IN SERVICE ACTIVITY FOR THE YEAR ENDED DECEMBER 31, 2016

ACCOUNT (1)	BALANCE AS OF		RETIREMENTS (4)	ADDITIONS (3)	TRANSFERS, ADJUSTMENTS & ACQUISITIONS (5)	BALANCE AS OF DECEMBER 31, 2016 (6)
	DECEMBER 31, 2015 (2)	DECEMBER 31, 2016 (6)				
DEPRECIABLE PLANT						
303.00 MISCELLANEOUS INTANGIBLE PLANT	11,721,275.67	398,397.57				12,119,673.24
303.10 MISCELLANEOUS INTANGIBLE PLANT - SMART METER SOFTWARE	2,831,840.91	1,257,495.90				4,089,336.81
352.10 STRUCTURES AND IMPROVEMENTS	764,597.96					764,597.96
352.20 STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	195,215.93					195,215.93
353.00 STATION EQUIPMENT	6,417,733.78					6,417,733.78
354.00 TOWERS AND FIXTURES	7,576.09					7,576.09
355.00 POLES AND FIXTURES	2,683,169.36	158,203.90	15,820.39			2,825,552.87
356.00 OVERHEAD CONDUCTORS AND DEVICES	2,722,010.42					2,722,010.42
357.00 UNDERGROUND CONDUIT	64,653.86					64,653.86
358.00 UNDERGROUND CONDUCTORS AND DEVICES	36,071.32					36,071.32
359.00 ROADS AND TRAILS	6,324.44					6,324.44
361.10 STRUCTURES AND IMPROVEMENTS	1,278,979.53	20,064.40	2,006.44			1,297,037.49
361.20 STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	448,648.71					448,648.71
362.00 STATION EQUIPMENT	50,740,000.87	1,966,543.08	196,654.31			52,509,889.64
364.00 POLES, TOWERS AND FIXTURES	8,704,204.97	8,704,204.97	870,420.50			110,824,665.61
365.00 OVERHEAD CONDUCTORS AND DEVICES	105,166,441.33	12,268,720.53	1,226,872.05			116,208,289.81
365.10 OVERHEAD CONDUCTORS AND DEVICES - CLEARING AND GRADING	48,591,447.12					48,591,447.12
366.00 UNDERGROUND CONDUIT	7,586,389.20	65,875.38	6,587.54			7,645,677.04
367.00 UNDERGROUND CONDUCTORS AND DEVICES	61,907,363.97	4,791,727.41	479,172.74			66,219,918.64
368.00 LINE TRANSFORMERS	102,964,358.06	5,451,182.77	545,118.28			107,870,422.55
369.00 SERVICES	38,032,758.97	862,260.56	86,226.06			38,808,793.47
370.10 METERS - SMART GRID	27,496,826.66	8,678,506.63				36,175,333.29
371.00 INSTALLATIONS ON CUSTOMERS' PREMISES	3,792,737.59					3,792,737.59
373.10 STREET LIGHTING AND SIGNAL SYSTEMS	7,616,561.05	82,357.86	8,235.79			7,690,683.12
373.20 STREET LIGHTING AND SIGNAL SYSTEMS - ESIP	24,999.70					24,999.70
390.10 STRUCTURES AND IMPROVEMENTS	5,609,642.50	602,889.88	60,288.99			6,152,243.39
390.20 STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	41,299.15					41,299.15
391.10 OFFICE FURNITURE AND EQUIPMENT	739,892.78					739,892.78
391.20 DATA PROCESSING EQUIPMENT	1,891,472.62		348,232.34			1,157,387.31
392.00 DATA PROCESSING EQUIPMENT SMART GRID	2,482,616.52	685,318.99	734,085.31			3,167,935.51
393.00 STORES EQUIPMENT	594,877.72					594,877.72
394.00 TOOLS, SHOP AND GARAGE EQUIPMENT	171,743.17		47,415.93			124,327.24
395.00 LABORATORY EQUIPMENT	2,433,042.03		475,073.55			1,957,968.48
396.00 POWER OPERATED EQUIPMENT	72,967.56		43,393.50			29,574.06
397.00 COMMUNICATION EQUIPMENT	461,035.33					461,035.33
398.00 MISCELLANEOUS EQUIPMENT	2,125,867.96	281,826.95	283,732.68			2,123,962.23
	63,789.66		30,023.68			33,765.98
TOTAL DEPRECIABLE PLANT	602,777,110.64	46,275,576.78	5,459,360.08		0.00	643,593,327.34

PENNSYLVANIA POWER COMPANY
 SUMMARY OF PLANT IN SERVICE ACTIVITY FOR THE YEAR ENDED DECEMBER 31, 2016

ACCOUNT (1)	BALANCE AS OF DECEMBER 31, 2015 (2)	ADDITIONS (3)	RETIREMENTS (4)	TRANSFERS, ADJUSTMENTS & ACQUISITIONS (5)	BALANCE AS OF DECEMBER 31, 2016 (6)
NONDEPRECIABLE PLANT					
301.00 ORGANIZATION	22,833.53				22,833.53
302.00 FRANCHISES AND CONSENTS	68,665.97				68,665.97
350.10 LAND	2,089,804.27				2,089,804.27
350.20 EASEMENTS	8,430,107.46				8,430,107.46
360.10 LAND	578,456.76				578,456.76
360.20 EASEMENTS	5,802,870.46				5,802,870.46
374.00 DISTRIBUTION PLANT ARO	4,407.74				4,407.74
389.10 LAND	226,639.25				226,639.25
389.20 EASEMENTS	310.93				310.93
399.10 GENERAL PLANT ARO	32,875.01				32,875.01
TOTAL NONDEPRECIABLE PLANT	17,256,971.38	0.00	0.00	0.00	17,256,971.38
TOTAL ELECTRIC PLANT	620,034,082.02	46,275,576.78	5,459,360.08	0.00	660,850,298.72

PENNSYLVANIA POWER COMPANY
 BRINGFORWARD TO DECEMBER 31, 2016, OF THE BOOK RESERVE AS OF DECEMBER 31, 2015

ACCOUNT (1)	BOOK RESERVE AS OF DECEMBER 31, 2015 (2)	DEPRECIATION ACCURUALS (3)	AMORTIZATION OF NET SALVAGE (4)	PROJECTED RETIREMENTS (5)	PROJECTED GROSS SALVAGE (6)	PROJECTED COST-OF REMOVAL (7)	ACQUISITIONS (8)	ADJUSTMENTS (9)	RESERVE AT END OF PERIOD (10)
303.00	9,014,763	632,977							9,647,740
303.10	181,335	516,666							698,001
352.10	521,767	6,193	310						528,270
352.20	102,386	2,655							105,041
353.00	4,625,924	53,909	9,881						4,689,714
354.00	7,524	5							7,529
355.00	890,609	49,854	12,673	15,820		44,772			892,544
356.00	907,380	45,730	5,356						958,466
357.00	53,669	1,073							54,742
358.00	29,095	656							29,751
359.00	5,040	79							5,119
361.10	539,671	16,487		2,006					554,152
361.20	195,885	6,236							202,121
362.00	13,149,461	1,471,311	138,007	196,654		98,327			14,463,798
364.00	33,057,699	2,245,063	589,726	870,421	8,704	2,176,051			32,854,720
365.00	23,093,526	2,334,741	742,420	1,226,872		1,006,035			24,137,780
365.10	4,737,789	1,263,378							6,001,167
366.00	2,263,193	143,943	316	6,588		2,240			2,398,624
367.00	20,338,538	1,377,368	130,656	479,173		531,882			20,835,527
368.00	31,687,438	2,867,353	262,048	545,118		98,121			34,173,620
369.00	19,152,873	503,312	130,061	86,226		172,452			19,527,568
370.10	1,127,985	3,043,529	701						4,172,215
371.00	2,443,141	85,337	9,300						2,537,778
373.10	4,050,257	252,570	62,545	8,236		2,635			4,354,501
373.20	3,690	1,162	7,424						12,276
390.10	2,884,153	103,505	2,743	60,289		6,029			2,924,083
390.20	7,740	942							8,682
391.10	585,872	66,252		348,232					303,892
391.20	1,265,574	335,070	5,578	734,085					872,137
391.25	434,082	539,628							973,710
392.00	144,048	76,501	(1,062)						219,487
393.00	108,057	9,149		47,416					69,790
394.00	785,493	208,134		475,074					518,553
395.00	53,514	2,466		43,394					12,587
396.00	188,459	28,354							216,813
397.00	113,298	337,224		283,733					166,789
398.00	47,702	7,653		30,024					25,331
TOTAL DEPRECIABLE PLANT	178,798,670	18,836,465	2,108,683	5,459,360	8,704	4,138,544	0	0	190,154,618
NONDEPRECIABLE PLANT									
302.00	772								772
374.00	2,352								2,352
399.10	21,479								21,479
TOTAL NONDEPRECIABLE PLA.	24,603	0	0	0	0	0	0	0	24,603
TOTAL	178,823,273	18,836,465	2,108,683	5,459,360	8,704	4,138,544	0	0	190,179,221

PENNSYLVANIA POWER COMPANY
 SUMMARY OF PLANT IN SERVICE ACTIVITY FOR THE YEAR ENDED DECEMBER 31, 2017

Account	BALANCE AS OF		RETIREMENTS	ADDITIONS	TRANSFERS, ADJUSTMENTS & ACQUISITIONS	BALANCE AS OF
	(1)	(2)				
DEPRECIABLE PLANT						
303.00	MISCELLANEOUS INTANGIBLE PLANT	12,119,673.24		679,997.21		12,799,670.45
303.10	MISCELLANEOUS INTANGIBLE PLANT - SMART METER SOFTWARE	4,089,336.81		1,994,182.08		6,083,518.89
352.10	STRUCTURES AND IMPROVEMENTS	764,597.96				764,597.96
352.20	STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	195,215.93				195,215.93
353.00	STATION EQUIPMENT	6,417,733.78				6,417,733.78
354.00	TOWERS AND FIXTURES	7,576.09				7,576.09
355.00	POLES AND FIXTURES	2,825,552.87				2,825,552.87
356.00	OVERHEAD CONDUCTORS AND DEVICES	2,722,010.42				2,722,010.42
357.00	UNDERGROUND CONDUIT	64,653.86				64,653.86
358.00	UNDERGROUND CONDUCTORS AND DEVICES	36,071.32				36,071.32
359.00	ROADS AND TRAILS	6,324.44				6,324.44
361.10	STRUCTURES AND IMPROVEMENTS	1,297,037.49		51,183.48	5,118.35	1,343,102.62
361.20	STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	448,648.71				448,648.71
362.00	STATION EQUIPMENT	52,509,889.64		5,015,980.79	501,598.08	57,024,272.35
364.00	POLES, TOWERS AND FIXTURES	110,824,665.61		10,499,315.64	1,049,931.56	120,274,049.69
365.00	OVERHEAD CONDUCTORS AND DEVICES	116,208,289.81		14,394,613.14	1,439,461.31	129,163,441.64
365.10	OVERHEAD CONDUCTORS AND DEVICES - CLEARING AND GRADING	48,591,447.12				48,591,447.12
366.00	UNDERGROUND CONDUIT	7,645,677.04		59,565.37	5,956.54	7,699,285.87
367.00	UNDERGROUND CONDUCTORS AND DEVICES	66,219,918.64		5,307,538.36	530,755.84	70,996,721.16
368.00	LINE TRANSFORMERS	107,870,422.55		5,408,622.98	540,862.30	112,738,183.23
369.00	SERVICES	38,808,793.47		723,387.59	72,338.76	39,459,842.30
370.10	METERS - SMART GRID	36,175,333.29		2,528,538.17		38,703,871.46
371.00	INSTALLATIONS ON CUSTOMERS' PREMISES	3,792,737.59				3,792,737.59
373.10	STREET LIGHTING AND SIGNAL SYSTEMS	7,690,683.12		72,686.84	7,268.68	7,756,101.28
373.20	STREET LIGHTING AND SIGNAL SYSTEMS - ESIP	24,999.70				24,999.70
390.10	STRUCTURES AND IMPROVEMENTS	6,152,243.39		335.47	33.55	6,152,545.31
390.20	STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	41,299.15				41,299.15
391.10	OFFICE FURNITURE AND EQUIPMENT	391,660.44				391,660.44
391.25	DATA PROCESSING EQUIPMENT	1,157,387.31				1,157,387.31
392.00	TRANSPORTATION EQUIPMENT	3,167,935.51		204,071.25		3,372,006.76
392.00	TRANSPORTATION EQUIPMENT	594,877.72				594,877.72
393.00	STORES EQUIPMENT	124,327.24				124,327.24
394.00	TOOLS, SHOP AND GARAGE EQUIPMENT	1,957,968.48				1,957,968.48
395.00	LABORATORY EQUIPMENT	29,574.06				29,574.06
396.00	POWER OPERATED EQUIPMENT	461,035.33				461,035.33
397.00	COMMUNICATION EQUIPMENT	2,123,962.23		137,179.05	159,458.02	2,101,683.26
398.00	MISCELLANEOUS EQUIPMENT	33,765.98			26,160.03	7,605.95
	TOTAL DEPRECIABLE PLANT	643,593,327.34		47,077,217.42	5,781,292.79	684,889,251.97
					0.00	

PENNSYLVANIA POWER COMPANY
 SUMMARY OF PLANT IN SERVICE ACTIVITY FOR THE YEAR ENDED DECEMBER 31, 2017

Account	BALANCE AS OF DECEMBER 31, 2016 (2)	ADDITIONS (3)	RETIREMENTS (4)	TRANSFERS, ADJUSTMENTS & ACQUISITIONS (5)	BALANCE AS OF DECEMBER 31, 2017 (6)
NONDEPRECIABLE PLANT					
301.00 ORGANIZATION	22,833.53				22,833.53
302.00 FRANCHISES AND CONSENTS	68,665.97				68,665.97
350.10 LAND	2,089,804.27				2,089,804.27
350.20 EASEMENTS	8,430,107.46				8,430,107.46
360.10 LAND	578,456.76				578,456.76
360.20 EASEMENTS	5,802,870.46				5,802,870.46
374.00 DISTRIBUTION PLANT ARO	4,407.74				4,407.74
389.10 LAND	226,639.25				226,639.25
389.20 EASEMENTS	310.93				310.93
399.10 GENERAL PLANT ARO	32,875.01				32,875.01
TOTAL NONDEPRECIABLE PLANT	17,256,971.38	0.00	0.00	0.00	17,256,971.38
TOTAL ELECTRIC PLANT					
	660,850,298.72	47,077,217.42	5,781,292.79	0.00	702,146,223.35

PENNSYLVANIA POWER COMPANY
 BRINGFORWARD TO DECEMBER 31, 2017, OF THE BOOK RESERVE AS OF DECEMBER 31, 2016

ACCOUNT (1)	BOOK RESERVE AS OF DECEMBER 31, 2016 (2)	DEPRECIATION ACCRUALS (3)	AMORTIZATION OF NET SALVAGE (4)	PROJECTED RETIREMENTS (5)	PROJECTED GROSS SALVAGE (6)	PROJECTED COST OF REMOVAL (7)	ACQUISITIONS (8)	ADJUSTMENTS (9)	RESERVE AT END OF PERIOD (10)
303.00	9,647,740	647,903							10,295,643
303.10	698,001	747,196							1,445,197
352.10	528,270	6,117	310						534,697
352.20	105,041	2,635							107,676
353.00	4,689,714	52,625	9,881						4,752,220
354.00	7,529	5							7,534
355.00	892,544	52,555	21,628						966,727
356.00	958,466	43,824	5,356						1,007,646
357.00	54,742	1,009							55,751
358.00	29,751	617							30,368
359.00	5,119	77							5,196
361.10	554,152	16,897		5,118					565,931
361.20	202,121	6,191							208,312
362.00	14,463,798	1,478,711	157,368	501,598	255,815				15,342,464
364.00	32,854,720	2,507,421	953,279	1,049,932	10,499	2,624,829			32,651,158
365.00	24,137,780	2,883,118	882,112	1,439,461		1,194,753			25,268,796
365.10	6,001,167	1,185,631							7,186,798
366.00	2,398,624	143,475	764	5,957		2,085			2,534,821
367.00	20,835,527	1,509,383	236,809	530,756		599,754			21,451,209
368.00	34,173,620	2,967,186	280,640	540,862		118,990			36,761,594
369.00	19,527,568	520,486	132,800	72,339		144,678			19,963,837
370.10	4,172,215	3,384,540		701					7,557,456
371.00	2,537,778	81,165	8,578						2,627,521
373.10	4,354,501	237,108	49,189	7,269		3,344			4,630,185
373.20	12,276	680	7,424						20,380
390.10	2,924,083	113,204	3,948	34					3,041,198
390.20	8,682	929				3			9,611
391.10	303,892	42,017							102,302
391.20	872,137	71,758	5,578	243,607					139,068
391.25	973,710	633,393		810,405					1,607,103
392.00	219,487	67,697	(1,062)						286,122
393.00	69,790	9,911		23,403					56,298
394.00	518,553	164,426		356,932					326,047
395.00	12,587	1,276		8,003					5,860
396.00	216,813	27,063							243,876
397.00	166,789	209,592		159,458					216,923
398.00	25,331	1,855		26,160					1,026
TOTAL DEPRECIABLE PLANT	190,154,618	19,819,676	2,755,303	5,781,293	10,499	4,944,251	0	0	202,014,551
NONDEPRECIABLE PLANT									
302.00	772								772
374.00	2,352								2,352
399.10	21,479								21,479
TOTAL NONDEPRECIABLE PLANT	24,603	0	0	0	0	0	0	0	24,603
TOTAL	190,179,221	19,819,676	2,755,303	5,781,293	10,499	4,944,251	0	0	202,039,154

PENNSYLVANIA POWER COMPANY

FILING REQUIREMENT V-B-1:

Provide a comparison of calculated depreciation accruals versus book accruals by function and by account if available.

RESPONSE:

Penn Power Exhibit JJS-7 Attachments A and B provide Pennsylvania Power Company's calculated and book accruals by function and by account for the future test year ending December 31, 2016 and the fully projected future test year ending December 31, 2017, respectively.

PENNSYLVANIA POWER COMPANY
 COMPARISON OF CALCULATED AND BOOK
 DEPRECIATION ACCRUALS AS OF DECEMBER 31, 2016

	ACCOUNT (1)	CALCULATED DEPRECIATION ACCRUALS (2)	BOOK DEPRECIATION ACCRUALS (3)
ELECTRIC PLANT			
INTANGIBLE PLANT			
303	MISCELLANEOUS INTANGIBLE PLANT	632,977	629,973
303.1	MISCELLANEOUS INTANGIBLE PLANT - SMART METER SOFTWARE	516,666	600,711
	TOTAL INTANGIBLE PLANT	1,149,643	1,230,684
TRANSMISSION PLANT			
352.1	STRUCTURES AND IMPROVEMENTS	6,193	6,132
352.2	STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	2,655	2,644
353	STATION EQUIPMENT	53,909	52,518
354	TOWERS AND FIXTURES	5	5
355	POLES AND FIXTURES	49,854	52,682
356	OVERHEAD CONDUCTORS AND DEVICES	45,730	43,831
357	UNDERGROUND CONDUIT	1,073	1,009
358	UNDERGROUND CONDUCTORS AND DEVICES	656	618
359	ROADS AND TRAILS	79	77
	TOTAL TRANSMISSION PLANT	160,154	159,516
DISTRIBUTION PLANT			
361.1	STRUCTURES AND IMPROVEMENTS	16,487	16,664
361.2	STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	6,236	6,178
362	STATION EQUIPMENT	1,471,311	1,418,110
364	POLES, TOWERS AND FIXTURES	2,245,063	2,409,547
365	OVERHEAD CONDUCTORS AND DEVICES	2,534,741	2,733,933
365.1	OVERHEAD CONDUCTORS AND DEVICES - CLEARING AND GRADING	1,263,378	1,183,231
366	UNDERGROUND CONDUIT	143,943	143,075
367	UNDERGROUND CONDUCTORS AND DEVICES	1,377,368	1,454,515
368	LINE TRANSFORMERS	2,867,353	2,906,294
369	SERVICES	503,312	518,062
370.1	METERS - SMART GRID	3,043,529	3,271,990
371	INSTALLATIONS ON CUSTOMERS' PREMISES	85,337	81,330
373.1	STREET LIGHTING AND SIGNAL SYSTEMS	252,570	236,355
373.2	STREET LIGHTING AND SIGNAL SYSTEMS - ESIP	1,162	680
	TOTAL DISTRIBUTION PLANT	15,811,790	16,379,964
GENERAL PLANT			
390.1	STRUCTURES AND IMPROVEMENTS	103,505	113,364
390.2	STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	942	928
391.1	OFFICE FURNITURE AND EQUIPMENT	66,252	60,963
391.2	DATA PROCESSING EQUIPMENT	335,070	110,455
391.25	DATA PROCESSING EQUIPMENT - SMART GRID	539,628	613,727
392	TRANSPORTATION EQUIPMENT	76,501	67,672
393	STORES EQUIPMENT	9,149	10,939
394	TOOLS, SHOP AND GARAGE EQUIPMENT	208,134	180,848
395	LABORATORY EQUIPMENT	2,466	1,476
396	POWER OPERATED EQUIPMENT	28,354	27,075
397	COMMUNICATION EQUIPMENT	337,224	210,613
398	MISCELLANEOUS EQUIPMENT	7,653	582
	TOTAL GENERAL PLANT	1,714,878	1,398,642
	TOTAL DEPRECIABLE PLANT	18,836,465	19,168,806

PENNSYLVANIA POWER COMPANY
 COMPARISON OF CALCULATED AND BOOK
 DEPRECIATION ACCRUALS AS OF DECEMBER 31, 2017

ACCOUNT (1)	CALCULATED DEPRECIATION ACCRUALS (2)	BOOK DEPRECIATION ACCRUALS (3)
ELECTRIC PLANT		
INTANGIBLE PLANT		
303 MISCELLANEOUS INTANGIBLE PLANT	647,903	669,453
303.1 MISCELLANEOUS INTANGIBLE PLANT - SMART METER SOFTWARE	747,196	883,784
TOTAL INTANGIBLE PLANT	1,395,099	1,553,237
TRANSMISSION PLANT		
352.1 STRUCTURES AND IMPROVEMENTS	6,117	6,110
352.2 STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	2,635	2,632
353 STATION EQUIPMENT	52,625	51,392
354 TOWERS AND FIXTURES	5	4
355 POLES AND FIXTURES	52,555	50,072
356 OVERHEAD CONDUCTORS AND DEVICES	43,824	42,676
357 UNDERGROUND CONDUIT	1,009	948
358 UNDERGROUND CONDUCTORS AND DEVICES	617	565
359 ROADS AND TRAILS	77	74
TOTAL TRANSMISSION PLANT	159,464	154,473
DISTRIBUTION PLANT		
361.1 STRUCTURES AND IMPROVEMENTS	16,897	17,545
361.2 STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	6,191	6,138
362 STATION EQUIPMENT	1,478,711	1,576,262
364 POLES, TOWERS AND FIXTURES	2,507,421	2,699,237
365 OVERHEAD CONDUCTORS AND DEVICES	2,883,118	3,095,204
365.1 OVERHEAD CONDUCTORS AND DEVICES - CLEARING AND GRADING	1,185,631	1,130,442
366 UNDERGROUND CONDUIT	143,475	142,691
367 UNDERGROUND CONDUCTORS AND DEVICES	1,509,383	1,584,288
368 LINE TRANSFORMERS	2,967,186	2,998,873
369 SERVICES	520,486	532,469
370.1 METERS - SMART GRID	3,384,540	3,299,851
371 INSTALLATIONS ON CUSTOMERS' PREMISES	81,165	77,486
373.1 STREET LIGHTING AND SIGNAL SYSTEMS	237,108	223,650
373.2 STREET LIGHTING AND SIGNAL SYSTEMS - ESIP	680	246
TOTAL DISTRIBUTION PLANT	16,921,992	17,384,382
GENERAL PLANT		
390.1 STRUCTURES AND IMPROVEMENTS	113,204	110,380
390.2 STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	929	916
391.1 OFFICE FURNITURE AND EQUIPMENT	42,017	35,676
391.2 DATA PROCESSING EQUIPMENT	71,758	123,623
391.25 DATA PROCESSING EQUIPMENT - SMART GRID	633,393	654,880
392 TRANSPORTATION EQUIPMENT	67,697	59,740
393 STORES EQUIPMENT	9,911	11,206
394 TOOLS, SHOP AND GARAGE EQUIPMENT	164,426	136,076
395 LABORATORY EQUIPMENT	1,276	1,495
396 POWER OPERATED EQUIPMENT	27,063	25,612
397 COMMUNICATION EQUIPMENT	209,592	189,400
398 MISCELLANEOUS EQUIPMENT	1,855	488
TOTAL GENERAL PLANT	1,343,121	1,349,492
TOTAL DEPRECIABLE PLANT	19,819,676	20,441,584

PENNSYLVANIA POWER COMPANY

FILING REQUIREMENT V-B-2:

Supply a schedule by account or by depreciable group showing the survivor curve or interim survivor curve and annual accrual rate estimated to be appropriate:

- a) For the purpose of this filing.
- b) For the purpose of the most recent rate 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 made in depreciation methods, procedures and techniques and the effect of the changes upon accumulated and annual depreciation, if any.

RESPONSE:

- a) Penn Power Exhibit JJS-8 Attachment A, columns 4 & 5, provide Pennsylvania Power Company's survivor curve and annual estimated accrual rate for the future test year. Attachment V-B-2b, columns 4 & 5, provides Pennsylvania Power Company's survivor curve and annual estimated accrual rate for the fully projected future test year.
- b) Penn Power Exhibit JJS-8 Attachments A and B, columns 2 & 3, provide Pennsylvania Power Company's survivor curve and annual estimated accrual rate for the most recent filing with the Commission.
- c) Penn Power Exhibit JJS-8 Attachments A and B, column 6, provide an explanation for any change in annual accrual rate by account. Changes reflect plant and reserve activity.
- d) These studies represent the same methods and techniques as set forth in the previous studies; however the depreciation procedure has changed. The survivor curve estimates are based on a service life study as described in Exhibit JJS 2 in the section titled, "Service Life Statistics," beginning on page VI-2.

PENNSYLVANIA POWER COMPANY
COMPARISON OF EXISTING SURVIVOR CURVE AND DEPRECIATION RATE
AS OF DECEMBER 31, 2016

	ACCOUNT (1)	MOST RECENT FILING		CURRENT FILING		REASON FOR ACCRUAL CHANGE (6)
		SURVIVOR CURVE (2)	ACCRUAL RATE (3)	SURVIVOR CURVE (4)	ACCRUAL RATE (5)	
ELECTRIC PLANT						
INTANGIBLE PLANT						
	303					
	303.1	MISCELLANEOUS INTANGIBLE PLANT		7-SQ	7-SQ	5.20 a
		MISCELLANEOUS INTANGIBLE PLANT - SMART METER SOFTWARE	4.30	7-SQ	7-SQ	14.69 a
TRANSMISSION PLANT						
	352.1	STRUCTURES AND IMPROVEMENTS	0.71	65-R4	65-R4	0.80 a
	352.2	STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	1.27	65-R4	65-R4	1.35 a
	353	STATION EQUIPMENT	0.69	58-R2	58-R2	0.82 a
	354	TOWERS AND FIXTURES	-	70-R4	70-R4	0.07 a
	355	POLES AND FIXTURES	1.37	62-R1.5	62-R1.5	1.86 a
	356	OVERHEAD CONDUCTORS AND DEVICES	1.17	62-R2	62-R2	1.61 a
	357	UNDERGROUND CONDUIT	1.59	45-S2.5	45-S2.5	1.56 a
	358	UNDERGROUND CONDUCTORS AND DEVICES	1.73	40-S1.5	40-S1.5	1.71 a
	359	ROADS AND TRAILS	1.14	55-S2.5	55-S2.5	1.22 a
DISTRIBUTION PLANT						
	361.1	STRUCTURES AND IMPROVEMENTS	1.03	65-R3	65-R3	1.28 a
	361.2	STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	1.21	65-R3	65-R3	1.38 a
	362	STATION EQUIPMENT	1.67	50-R0.5	50-R0.5	2.70 a
	364	POLES, TOWERS AND FIXTURES	1.66	55-R2	55-R2	2.17 a
	365	OVERHEAD CONDUCTORS AND DEVICES	1.55	60-R1	60-R1	2.35 a
	365.1	OVERHEAD CONDUCTORS AND DEVICES - CLEARING AND GRADING	1.59	60-R1	60-R1	2.44 a
	366	UNDERGROUND CONDUIT	1.55	60-R2.5	60-R2.5	1.87 a
	367	UNDERGROUND CONDUCTORS AND DEVICES	1.76	50-R2.5	50-R2.5	2.20 a
	368	LINE TRANSFORMERS	1.94	44-R1.5	44-R1.5	2.69 a
	369	SERVICES	1.20	55-R4	55-R4	1.33 a
	370.1	METERS - SMART GRID	6.81	15-S0.5	15-S0.5	9.04 a
	371	INSTALLATIONS ON CUSTOMERS' PREMISES	1.83	33-R2	33-R2	2.14 a
	373.1	STREET LIGHTING AND SIGNAL SYSTEMS	1.94	27-R2	27-R2	3.07 a
	373.2	STREET LIGHTING AND SIGNAL SYSTEMS - ESIP	3.54	27-R2	27-R2	2.72 a

PENNSYLVANIA POWER COMPANY
 COMPARISON OF EXISTING SURVIVOR CURVE AND DEPRECIATION RATE
 AS OF DECEMBER 31, 2016

	ACCOUNT (1)	MOST RECENT FILING		CURRENT FILING		REASON FOR ACCRUAL CHANGE (6)	
		SURVIVOR CURVE (2)	ACCRUAL RATE (3)	SURVIVOR CURVE (4)	ACCRUAL RATE (5)		
		GENERAL PLANT					
390.1	STRUCTURES AND IMPROVEMENTS	50-R2.5	1.08	50-R2.5	1.84	a	
390.2	STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	50-R2.5	1.87	50-R2.5	2.25	a	
391.1	OFFICE FURNITURE AND EQUIPMENT	20-SQ	7.70	20-SQ	15.57	a	
391.2	DATA PROCESSING EQUIPMENT	5-SQ	47.36	5-SQ	9.54	a	
391.25	DATA PROCESSING EQUIPMENT - SMART GRID	5-SQ	20.09	5-SQ	19.37	a	
392	TRANSPORTATION EQUIPMENT	10-L2	5.01	10-L2	11.38	a	
393	STORES EQUIPMENT	30-SQ	6.56	30-SQ	8.80	a	
394	TOOLS, SHOP AND GARAGE EQUIPMENT	25-SQ	10.65	25-SQ	9.24	a	
395	LABORATORY EQUIPMENT	20-SQ	8.25	20-SQ	4.99	a	
396	POWER OPERATED EQUIPMENT	18-S1.5	5.13	18-S1.5	5.87	a	
397	COMMUNICATION EQUIPMENT	15-SQ	7.99	15-SQ	9.92	a	
398	MISCELLANEOUS EQUIPMENT	20-SQ	28.72	20-SQ	1.72	a	

LEGEND
 a - PLANT AND RESERVE ACTIVITY

PENNSYLVANIA POWER COMPANY
 COMPARISON OF EXISTING SURVIVOR CURVE AND DEPRECIATION RATE
 AS OF DECEMBER 31, 2017

	ACCOUNT (1)	MOST RECENT FILING		CURRENT FILING		REASON FOR ACCRUAL CHANGE (6)
		SURVIVOR CURVE (2)	ACCRUAL RATE (3)	SURVIVOR CURVE (4)	ACCRUAL RATE (5)	
ELECTRIC PLANT						
INTANGIBLE PLANT						
	303	MISCELLANEOUS INTANGIBLE PLANT				
	303.1	MISCELLANEOUS INTANGIBLE PLANT - SMART METER SOFTWARE	4.30 4.30	7-SQ 7-SQ	5.23 14.53	a a
TRANSMISSION PLANT						
	352.1	STRUCTURES AND IMPROVEMENTS	0.71	65-R4	0.80	a
	352.2	STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	1.27	65-R4	1.35	a
	353	STATION EQUIPMENT	0.69	58-R2	0.80	a
	354	TOWERS AND FIXTURES	-	70-R4	0.05	a
	355	POLES AND FIXTURES	1.37	62-R1.5	1.77	a
	356	OVERHEAD CONDUCTORS AND DEVICES	1.17	62-R2	1.57	a
	357	UNDERGROUND CONDUIT	1.59	45-S2.5	1.47	a
	358	UNDERGROUND CONDUCTORS AND DEVICES	1.73	40-S1.5	1.57	a
	359	ROADS AND TRAILS	1.14	55-S2.5	1.17	a
DISTRIBUTION PLANT						
	361.1	STRUCTURES AND IMPROVEMENTS	1.03	65-R3	1.31	a
	361.2	STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	1.21	65-R3	1.37	a
	362	STATION EQUIPMENT	1.67	50-R0.5	2.76	a
	364	POLES, TOWERS AND FIXTURES	1.66	55-R2	2.24	a
	365	OVERHEAD CONDUCTORS AND DEVICES	1.55	60-R1	2.40	a
	365.1	OVERHEAD CONDUCTORS AND DEVICES - CLEARING AND GRADING	1.59	60-R1	2.33	a
	366	UNDERGROUND CONDUIT	1.55	60-R2.5	1.85	a
	367	UNDERGROUND CONDUCTORS AND DEVICES	1.76	50-R2.5	2.23	a
	368	LINE TRANSFORMERS	1.94	44-R1.5	2.66	a
	369	SERVICES	1.20	55-R4	1.35	a
	370.1	METERS - SMART GRID	6.81	15-S0.5	8.53	a
	371	INSTALLATIONS ON CUSTOMERS' PREMISES	1.83	33-R2	2.04	a
	373.1	STREET LIGHTING AND SIGNAL SYSTEMS	1.94	27-R2	2.88	a
	373.2	STREET LIGHTING AND SIGNAL SYSTEMS - ESIP	3.54	27-R2	0.98	a

PENNSYLVANIA POWER COMPANY
 COMPARISON OF EXISTING SURVIVOR CURVE AND DEPRECIATION RATE
 AS OF DECEMBER 31, 2017

	ACCOUNT (1)	MOST RECENT FILING		CURRENT FILING		REASON FOR ACCRUAL CHANGE (6)	
		SURVIVOR CURVE (2)	ACCRUAL RATE (3)	SURVIVOR CURVE (4)	ACCRUAL RATE (5)		
		GENERAL PLANT					
390.1	STRUCTURES AND IMPROVEMENTS	50-R2.5	1.08	50-R2.5	1.79	a	
390.2	STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	50-R2.5	1.87	50-R2.5	2.22	a	
391.1	OFFICE FURNITURE AND EQUIPMENT	20-SQ	7.70	20-SQ	24.10	a	
391.2	DATA PROCESSING EQUIPMENT	5-SQ	47.36	5-SQ	35.63	a	
391.25	DATA PROCESSING EQUIPMENT - SMART GRID	5-SQ	20.09	5-SQ	19.42	a	
392	TRANSPORTATION EQUIPMENT	10-L2	5.01	10-L2	10.04	a	
393	STORES EQUIPMENT	30-SQ	6.56	30-SQ	11.10	a	
394	TOOLS, SHOP AND GARAGE EQUIPMENT	25-SQ	10.65	25-SQ	8.50	a	
395	LABORATORY EQUIPMENT	20-SQ	8.25	20-SQ	6.93	a	
396	POWER OPERATED EQUIPMENT	18-S1.5	5.13	18-S1.5	5.56	a	
397	COMMUNICATION EQUIPMENT	15-SQ	7.99	15-SQ	9.01	a	
398	MISCELLANEOUS EQUIPMENT	20-SQ	28.72	20-SQ	6.42	a	

LEGEND
 a - PLANT AND RESERVE ACTIVITY

PENNSYLVANIA POWER COMPANY

FILING REQUIREMENT V-C-1:

Where the retirement rate actuarial method of mortality analysis 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.

RESPONSE:

Exhibit JJS 2 provides the observed and estimated survivor curves and life tables for all accounts analyzed by the actuarial method.

PENNSYLVANIA POWER COMPANY

FILING REQUIREMENT V-D-1:

Provide the surviving original cost plant at the appropriate test year date or dates by account or 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:

See Penn Power Exhibit JJS-10 Attachments A and B that provide Pennsylvania Power Company's surviving original cost electric plant in service, accumulated book depreciation reserve, annual depreciation expense accruals, survivor curve, future depreciation accruals, and composite remaining life for the future test year as of December 31, 2016 and the fully projected future test year as of December 31, 2017. No claim is being made in this rate case filing for contributions in aid of construction.

PENNSYLVANIA POWER COMPANY
 TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND
 CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO ELECTRIC PLANT AS OF DECEMBER 31, 2016

	ACCOUNT (1)	SURVIVOR CURVE (2)	ORIGINAL COST (3)	BOOK DEPRECIATION RESERVE (4)	FUTURE ACCRUALS (5)	CALCULATED ANNUAL ACCRUAL AMOUNT (6)	ANNUAL ACCRUAL RATE (7)=(6)/(5)	COMPOSITE REMAINING LIFE (8)=(5)/(6)
	ELECTRIC PLANT							
	INTANGIBLE PLANT							
303	MISCELLANEOUS INTANGIBLE PLANT	7-SQ	12,119,673.24	9,647,740	2,471,933	629,973	5.20	3.9
303.1	MISCELLANEOUS INTANGIBLE PLANT - SMART METER SOFTWARE	7-SQ	4,089,336.81	698,000	3,391,336	600,711	14.69	5.6
	TOTAL INTANGIBLE PLANT		16,209,010.05	10,345,741	5,863,269	1,230,684	7.59	
	TRANSMISSION PLANT							
352.1	STRUCTURES AND IMPROVEMENTS	65-R4	764,597.96	528,270	236,328	6,132	0.80	38.5
352.2	STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	65-R4	195,215.93	105,041	90,175	2,644	1.35	34.1
353	STATION EQUIPMENT	58-R2	6,417,733.78	4,689,714	1,728,020	52,518	0.82	32.9
354	TOWERS AND FIXTURES	70-R4	7,576.09	7,229	47	5	0.07	9.4
355	POLES AND FIXTURES	62-R1.5	2,825,352.87	892,544	1,933,009	52,682	1.86	36.7
356	OVERHEAD CONDUCTORS AND DEVICES	62-R2	2,722,010.42	938,466	1,763,544	43,831	1.61	40.2
357	UNDERGROUND CONDUIT	45-S2.3	64,653.86	54,742	9,912	1,009	1.56	9.8
358	UNDERGROUND CONDUCTORS AND DEVICES	40-S1.5	36,071.32	29,751	6,320	618	1.71	10.2
359	ROADS AND TRAILS	55-S2.5	6,324.44	5,119	1,205	77	1.22	15.6
	TOTAL TRANSMISSION PLANT		13,039,736.67	7,271,176	5,768,560	159,516	1.22	
	DISTRIBUTION PLANT							
361.1	STRUCTURES AND IMPROVEMENTS	65-R3	1,297,037.49	554,152	742,885	16,664	1.28	44.6
361.2	STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	65-R3	448,648.71	202,121	246,528	6,178	1.38	39.9
362	STATION EQUIPMENT	50-R0.5	52,509,889.64	14,463,798	38,046,092	1,418,110	2.70	26.8
364	POLES, TOWERS AND FIXTURES	55-R2	110,824,665.61	32,854,720	77,969,946	2,409,547	2.17	32.4
365	OVERHEAD CONDUCTORS AND DEVICES	60-R1	116,208,289.81	24,137,780	92,070,510	2,733,933	2.35	33.7
363.1	OVERHEAD CONDUCTORS AND DEVICES - CLEARING AND GRADING	60-R1	48,591,447.12	6,001,167	42,590,280	1,183,231	2.44	36.0
366	UNDERGROUND CONDUIT	60-R2.5	7,645,677.04	2,398,624	5,247,053	143,075	1.87	36.7
367	UNDERGROUND CONDUCTORS AND DEVICES	50-R2.5	66,219,918.64	20,835,527	45,384,392	1,454,515	2.20	31.2
368	LINE TRANSFORMERS	44-R1.5	107,870,422.55	34,173,620	73,696,803	2,906,294	2.69	25.4
369	SERVICES	55-R4	38,808,793.47	19,527,568	19,281,225	518,062	1.33	37.2
370.1	METERS - SMART GRID	15-S0.5	36,175,333.29	4,172,215	32,003,118	3,271,990	9.04	9.8
371	INSTALLATIONS ON CUSTOMERS' PREMISES	33-R2	3,792,737.59	2,537,778	1,254,960	81,330	2.14	15.4
373.1	STREET LIGHTING AND SIGNAL SYSTEMS	27-R2	7,690,683.12	4,354,501	3,336,182	236,555	3.07	14.1
373.2	STREET LIGHTING AND SIGNAL SYSTEMS - ESIP	27-R2	24,999.70	12,276	12,724	680	2.72	18.7
	TOTAL DISTRIBUTION PLANT		598,108,543.78	166,225,847	431,882,698	16,379,964	2.74	

PENNSYLVANIA POWER COMPANY
 TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND
 CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO ELECTRIC PLANT AS OF DECEMBER 31, 2016

ACCOUNT (1)	SURVIVOR CURVE (2)	ORIGINAL COST (3)	BOOK DEPRECIATION RESERVE (4)	FUTURE ACCRUALS (5)	CALCULATED ANNUAL ACCRUAL AMOUNT (6)	ACCRUAL RATE (7)=(6)/(5)	COMPOSITE REMAINING LIFE (8)=(5)/(6)
GENERAL PLANT							
390.1	30-R2.5	6,152,243.39	2,924,083	3,228,160	113,564	1.84	28.5
390.2	50-R2.5	41,299.15	8,682	32,617	928	2.25	35.1
391.1	20-SQ	391,660.44	303,892	87,768	60,963	15.57	1.4
391.2	5-SQ	1,157,387.31	872,137	285,250	110,455	9.54	2.6
391.25	5-SQ	3,167,955.51	973,710	2,194,226	613,727	19.37	3.6
392	10-L2	594,877.72	219,487	375,391	67,672	11.38	5.5
393	30-SQ	124,377.24	69,790	54,537	10,939	8.80	5.0
394	25-SQ	1,957,968.48	518,553	1,439,415	180,848	9.24	8.0
395	20-SQ	29,574.06	12,587	16,987	1,476	4.99	11.5
396	18-S1.5	461,035.33	216,813	244,222	27,075	5.87	9.0
397	15-SQ	2,123,962.23	166,789	1,957,173	210,613	9.92	9.3
398	20-SQ	33,765.98	25,331	8,435	582	1.72	14.5
		16,236,036.84	6,311,854	9,924,181	1,398,642	8.61	
		643,593,327.34	190,154,618	453,438,708	19,168,806	2.98	
TOTAL DEPRECIABLE PLANT							
NONDEPRECIABLE							
301	ORGANIZATION	22,833.53					
302	FRANCHISES AND CONSENTS	68,665.97	772				
350.1	LAND	2,089,804.27					
350.2	EASEMENTS	8,430,107.46					
360.1	LAND	578,456.76					
360.2	EASEMENTS	5,802,870.46					
374	DISTRIBUTION PLANT ARO	4,407.74	2,352				
389.1	LAND	226,639.25					
389.2	EASEMENTS	310.93					
399.1	GENERAL PLANT ARO	32,875.01	21,479				
		17,256,971.38	24,603				
		660,850,298.72	190,179,221	453,438,708	19,168,806		
TOTAL NONDEPRECIABLE PLANT							
TOTAL ELECTRIC PLANT							

PENNSYLVANIA POWER COMPANY
 TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND
 CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO ELECTRIC PLANT AS OF DECEMBER 31, 2017

	ACCOUNT (1)	SURVIVOR CURVE (2)	ORIGINAL COST (3)	BOOK DEPRECIATION RESERVE (4)	FUTURE ACCRUALS (5)	CALCULATED ANNUAL ACCRUAL AMOUNT (6)	ANNUAL ACCRUAL RATE (7)=(6)/(3)	COMPOSITE REMAINING LIFE (8)=(5)/(6)
	ELECTRIC PLANT							
	INTANGIBLE PLANT							
303	MISCELLANEOUS INTANGIBLE PLANT	7-SQ	12,799,670.45	10,295,643	2,504,027	669,453	5.23	3.7
303.1	MISCELLANEOUS INTANGIBLE PLANT - SMART METER SOFTWARE	7-SQ	6,083,518.89	1,445,197	4,638,322	883,784	14.55	5.2
	TOTAL INTANGIBLE PLANT		18,883,189.34	11,740,840	7,142,349	1,553,237	8.23	
	TRANSMISSION PLANT							
352.1	STRUCTURES AND IMPROVEMENTS	65-R4	764,597.96	534,697	229,901	6,110	0.80	37.6
352.2	STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	65-R4	195,215.93	107,676	87,540	2,632	1.35	33.3
353	STATION EQUIPMENT	58-R2	6,417,733.78	4,752,220	1,665,514	51,392	0.80	32.4
354	TOWERS AND FIXTURES	70-R4	7,376,009	7,534	42	4	0.05	10.5
355	POLES AND FIXTURES	62-R1.5	2,825,552.87	966,727	1,858,826	50,072	1.77	37.1
356	OVERHEAD CONDUCTORS AND DEVICES	62-R2	2,722,010.42	1,007,646	1,714,364	42,676	1.57	40.2
357	UNDERGROUND CONDUIT	45-S2.5	64,653.86	55,751	8,903	948	1.47	9.4
358	UNDERGROUND CONDUCTORS AND DEVICES	40-S1.5	36,071.32	30,368	5,703	565	1.57	10.1
359	ROADS AND TRAILS	55-S2.5	6,324.44	5,196	1,128	74	1.17	15.2
	TOTAL TRANSMISSION PLANT		13,039,736.67	7,467,815	5,571,921	154,473	1.18	
	DISTRIBUTION PLANT							
361.1	STRUCTURES AND IMPROVEMENTS	65-R3	1,343,102.62	565,931	777,172	17,545	1.31	44.3
361.2	STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	65-R3	448,648.71	208,312	240,337	6,138	1.37	39.2
362	STATION EQUIPMENT	50-R0.5	57,024,272.35	15,342,464	41,681,808	1,576,262	2.76	26.4
364	POLES, TOWERS AND FIXTURES	55-R2	120,274,049.69	32,651,158	87,622,892	2,692,237	2.24	32.5
365	OVERHEAD CONDUCTORS AND DEVICES	60-R1	129,163,441.64	25,268,796	103,894,646	3,095,204	2.40	33.6
365.1	OVERHEAD CONDUCTORS AND DEVICES - CLEARING AND GRADING	60-R1	48,591,447.12	7,186,798	41,404,649	1,130,442	2.33	36.6
366	UNDERGROUND CONDUIT	60-R2.5	7,699,285.87	2,534,821	5,164,465	142,691	1.85	36.2
367	UNDERGROUND CONDUCTORS AND DEVICES	50-R2.5	70,996,721.16	21,451,209	49,545,512	1,584,288	2.23	31.3
368	LINE TRANSFORMERS	44-R1.5	112,738,183.23	36,761,594	75,976,589	2,998,873	2.66	25.3
369	SERVICES	53-R4	39,459,842.30	19,963,837	19,496,005	532,469	1.35	36.6
370.1	METERS - SMART GRID	15-S0.5	38,703,871.46	7,357,456	31,346,415	3,299,831	8.53	9.4
371	INSTALLATIONS ON CUSTOMERS' PREMISES	33-R2	3,792,737.59	2,627,521	1,165,217	77,486	2.04	15.0
373.1	STREET LIGHTING AND SIGNAL SYSTEMS	27-R2	7,756,101.28	4,630,185	3,125,916	223,650	2.88	14.0
373.2	STREET LIGHTING AND SIGNAL SYSTEMS - ESIP	27-R2	24,999.70	20,380	4,620	246	0.98	18.8
	TOTAL DISTRIBUTION PLANT		638,016,704.72	176,770,462	461,246,243	17,384,382	2.72	

PENNSYLVANIA POWER COMPANY
 TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND
 CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO ELECTRIC PLANT AS OF DECEMBER 31, 2017

ACCOUNT (1)	SURVIVOR CURVE (2)	ORIGINAL COST (3)	BOOK DEPRECIATION RESERVE (4)	FUTURE ACCRUALS (5)	ACCUMULATED AMOUNT (6)	ACCUMULATED ANNUAL ACCURAL RATE (7)=(6)/(3)	COMPOSITE REMAINING LIFE (8)=(5)/(6)
GENERAL PLANT							
390.1	50-R2.5	6,152,543.31	3,041,198	3,111,347	110,380	1.79	28.2
390.2	50-R2.5	41,299.15	9,611	31,688	916	2.22	34.6
391.1	20-SQ	148,053.09	102,302	45,751	35,676	24.10	1.3
391.2	5-SQ	346,982.71	139,068	207,915	123,623	35.63	1.7
391.25	5-SQ	3,372,006.76	1,607,103	1,764,904	654,880	19.42	2.7
392	10-L2	594,877.72	286,122	308,756	59,740	10.04	5.2
393	30-SQ	100,924.41	56,298	44,626	11,206	11.10	4.0
394	25-SQ	1,601,036.67	326,047	1,274,990	136,076	8.50	9.4
395	20-SQ	21,370.88	5,860	15,711	1,495	6.93	10.3
396	18-S1.5	461,033.33	243,876	217,159	23,612	5.56	8.5
397	15-SQ	2,101,683.26	216,923	1,884,760	189,400	9.01	10.0
398	20-SQ	7,603.95	1,026	6,580	488	6.42	13.5
		<u>14,949,621.24</u>	<u>6,035,434</u>	<u>8,914,187</u>	<u>1,349,492</u>	<u>9.03</u>	
		684,889,251.97	202,014,551	482,874,700	20,441,584	2.98	
NONDEPRECIABLE							
301	ORGANIZATION	22,833.53					
302	FRANCHISES AND CONSENTS	68,665.97	772				
350.1	LAND	2,089,804.27					
350.2	EASEMENTS	8,430,107.46					
360.1	LAND	578,456.76					
360.2	EASEMENTS	5,802,870.46	2,332				
374	DISTRIBUTION PLANT ARO	4,407.74					
389.1	LAND	226,639.25					
389.2	EASEMENTS	310.93					
399.1	GENERAL PLANT ARO	32,875.01	21,479				
		<u>17,256,971.38</u>	<u>24,603</u>				
		702,146,223.35	202,039,154	482,874,700	20,441,584		
TOTAL NONDEPRECIABLE PLANT							
TOTAL ELECTRIC PLANT							

PENNSYLVANIA POWER COMPANY

FILING REQUIREMENT V-D-2:

Provide representative examples of detail calculations by vintage at account or at a more detailed level, as performed for these purposes. Other vintage detail calculations shall be subject to request.

RESPONSE:

Examples of detailed depreciation calculations by vintage within account at December 31, 2015 are set forth on pages II-7 through II-68 of Exhibit JJS 1; at December 31, 2016 are set forth on pages VII-7 through VII-63 of Exhibit JJS 2; and at December 31, 2017 are set forth on pages II-7 through II-63 of Exhibit JJS 3.

PENNSYLVANIA POWER COMPANY

FILING REQUIREMENT V-E-1:

Provide a description of the depreciation methods utilized in calculating annual depreciation amounts and depreciation reserves, together with a discussion of the significant factors which were considered in arriving at estimates of service life and forecast retirements by facilities, accounts or sub-accounts, as applicable.

RESPONSE:

The depreciation methods utilized in calculating annual and accrued depreciation are discussed in the section titled, "Calculation of Annual and Accrued Depreciation," beginning on page IV-2 of Exhibit JJS 2. The considerations for determining estimates of service life are set forth in Section III of Exhibit JJS-2.

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.

Plant in service

RESPONSE:

See Penn Power Exhibit JJS-13 Attachment A that provides Pennsylvania Power Company's plant in service balances by account as of December 31, 2014 and December 31, 2015. Plant in service as of December 31, 2016 and 2017 is provided in Penn Power Exhibit JJS-10 Attachments A and B.

PENNSYLVANIA POWER COMPANY
 ELECTRIC PLANT IN SERVICE
 AS OF DECEMBER 31

ACCOUNT	2014	2015
(1)	(2)	(3)
ELECTRIC PLANT		
INTANGIBLE PLANT		
303 MISCELLANEOUS INTANGIBLE PLANT	10,631,913.08	11,721,275.67
303.1 MISCELLANEOUS INTANGIBLE PLANT - SMART METER SOFTWARE		2,831,840.91
TOTAL INTANGIBLE PLANT	10,631,913.08	14,553,116.58
TRANSMISSION PLANT		
352.1 STRUCTURES AND IMPROVEMENTS	766,036.66	764,597.96
352.2 STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	196,170.87	195,215.93
353 STATION EQUIPMENT	6,485,466.42	6,417,733.78
354 TOWERS AND FIXTURES	7,576.09	7,576.09
355 POLES AND FIXTURES	2,546,244.83	2,683,169.36
356 OVERHEAD CONDUCTORS AND DEVICES	2,188,979.10	2,722,010.42
357 UNDERGROUND CONDUIT	64,653.86	64,653.86
358 UNDERGROUND CONDUCTORS AND DEVICES	36,069.81	36,071.32
359 ROADS AND TRAILS	6,324.44	6,324.44
TOTAL TRANSMISSION PLANT	12,297,522.08	12,897,353.16
DISTRIBUTION PLANT		
361.1 STRUCTURES AND IMPROVEMENTS	1,174,161.05	1,278,979.53
361.2 STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	451,496.15	448,648.71
362 STATION EQUIPMENT	43,328,331.50	50,740,000.87
364 POLES, TOWERS AND FIXTURES	98,509,922.27	102,990,881.14
365 OVERHEAD CONDUCTORS AND DEVICES	98,828,126.05	105,166,441.33
365.1 OVERHEAD CONDUCTORS AND DEVICES - CLEARING AND GRADING	44,870,538.37	48,591,447.12
366 UNDERGROUND CONDUIT	7,442,818.17	7,586,389.20
367 UNDERGROUND CONDUCTORS AND DEVICES	58,328,948.84	61,907,363.97
368 LINE TRANSFORMERS	99,756,623.21	102,964,358.06
369 SERVICES	37,071,299.14	38,032,758.97
370.1 METERS - SMART GRID	6,763,827.07	27,496,826.66
371 INSTALLATIONS ON CUSTOMERS' PREMISES	3,765,161.30	3,792,737.59
373.1 STREET LIGHTING AND SIGNAL SYSTEMS	7,474,201.18	7,616,561.05
373.2 STREET LIGHTING AND SIGNAL SYSTEMS - ESIP	23,337.22	24,999.70
TOTAL DISTRIBUTION PLANT	507,788,791.52	558,638,393.90
GENERAL PLANT		
390.1 STRUCTURES AND IMPROVEMENTS	5,608,614.49	5,609,642.50
390.2 STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	41,239.11	41,299.15
391.1 OFFICE FURNITURE AND EQUIPMENT	781,359.34	739,892.78
391.2 DATA PROCESSING EQUIPMENT	2,051,778.58	1,891,472.62
391.25 DATA PROCESSING EQUIPMENT - SMART GRID	1,443,424.74	2,482,616.52
392 TRANSPORTATION EQUIPMENT	300,777.81	594,877.72
393 STORES EQUIPMENT	176,993.33	171,743.17
394 TOOLS, SHOP AND GARAGE EQUIPMENT	2,447,819.98	2,433,042.03
395 LABORATORY EQUIPMENT	78,583.27	72,967.56
396 POWER OPERATED EQUIPMENT	460,370.28	461,035.33
397 COMMUNICATION EQUIPMENT	2,839,364.01	2,125,867.96
398 MISCELLANEOUS EQUIPMENT	66,995.07	63,789.66
TOTAL GENERAL PLANT	16,297,320.01	16,688,247.00
TOTAL DEPRECIABLE PLANT	547,015,546.69	602,777,110.64

PENNSYLVANIA POWER COMPANY
 ELECTRIC PLANT IN SERVICE
 AS OF DECEMBER 31

ACCOUNT	2014	2015
(1)	(2)	(3)
NONDEPRECIABLE		
301 ORGANIZATION	22,833.53	22,833.53
302 FRANCHISES AND CONSENTS	68,665.97	68,665.97
350.1 LAND	2,089,804.27	2,089,804.27
350.2 EASEMENTS	8,430,014.46	8,430,107.46
360.1 LAND	584,230.90	578,456.76
360.2 EASEMENTS	5,800,268.70	5,802,870.46
374 DISTRIBUTION PLANT ARO	4,407.74	4,407.74
389.1 LAND	226,639.25	226,639.25
389.2 EASEMENTS	310.93	310.93
399.1 GENERAL PLANT ARO	32,875.01	32,875.01
TOTAL NONDEPRECIABLE PLANT	17,260,050.76	17,256,971.38
TOTAL ELECTRIC PLANT	564,275,597.45	620,034,082.02

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.

Accumulated depreciation

RESPONSE:

See Penn Power Exhibit JJS-14 Attachment A that provides Pennsylvania Power Company's accumulated depreciation by account as of December 31, 2014 and December 31, 2015. Accumulated depreciation as of December 31, 2016 and 2017 is provided in Penn Power Exhibit JJS-10 Attachments A and B.

**PENNSYLVANIA POWER COMPANY
 ACCUMULATED DEPRECIATION AND AMORTIZATION
 AS OF DECEMBER 31**

ACCOUNT (1)	2014 (2)	2015 (3)
ELECTRIC PLANT		
INTANGIBLE PLANT		
303 MISCELLANEOUS INTANGIBLE PLANT	8,506,017	9,014,763
303.1 MISCELLANEOUS INTANGIBLE PLANT - SMART METER SOFTWARE		181,335
TOTAL INTANGIBLE PLANT	8,506,017	9,196,098
TRANSMISSION PLANT		
352.1 STRUCTURES AND IMPROVEMENTS	520,836	521,767
352.2 STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	96,779	102,386
353 STATION EQUIPMENT	4,590,660	4,625,924
354 TOWERS AND FIXTURES	7,576	7,524
355 POLES AND FIXTURES	773,250	890,609
356 OVERHEAD CONDUCTORS AND DEVICES	846,420	907,380
357 UNDERGROUND CONDUIT	52,641	53,669
358 UNDERGROUND CONDUCTORS AND DEVICES	28,471	29,095
359 ROADS AND TRAILS	4,968	5,040
TOTAL TRANSMISSION PLANT	6,921,601	7,143,394
DISTRIBUTION PLANT		
361.1 STRUCTURES AND IMPROVEMENTS	537,199	539,671
361.2 STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	188,494	195,885
362 STATION EQUIPMENT	12,873,611	13,149,461
364 POLES, TOWERS AND FIXTURES	30,645,541	33,057,699
365 OVERHEAD CONDUCTORS AND DEVICES	21,083,709	23,093,526
365.1 OVERHEAD CONDUCTORS AND DEVICES - CLEARING AND GRADING	3,996,115	4,737,789
366 UNDERGROUND CONDUIT	2,145,499	2,263,193
367 UNDERGROUND CONDUCTORS AND DEVICES	19,175,338	20,338,558
368 LINE TRANSFORMERS	31,605,812	31,687,458
369 SERVICES	18,434,711	19,152,873
370.1 METERS - SMART GRID	125,556	1,127,985
371 INSTALLATIONS ON CUSTOMERS' PREMISES	2,376,510	2,443,141
373.1 STREET LIGHTING AND SIGNAL SYSTEMS	4,469,915	4,050,257
373.2 STREET LIGHTING AND SIGNAL SYSTEMS - ESIP	2,979	3,690
TOTAL DISTRIBUTION PLANT	147,660,989	155,841,186
GENERAL PLANT		
390.1 STRUCTURES AND IMPROVEMENTS	3,328,147	2,884,153
390.2 STRUCTURES AND IMPROVEMENTS - CLEARING AND GRADING	7,271	7,740
391.1 OFFICE FURNITURE AND EQUIPMENT	631,420	585,872
391.2 DATA PROCESSING EQUIPMENT	720,089	1,265,574
391.25 DATA PROCESSING EQUIPMENT - SMART GRID	139,363	434,082
392 TRANSPORTATION EQUIPMENT	210,076	144,048
393 STORES EQUIPMENT	104,250	108,057
394 TOOLS, SHOP AND GARAGE EQUIPMENT	564,386	785,493
395 LABORATORY EQUIPMENT	52,813	53,514
396 POWER OPERATED EQUIPMENT	164,823	188,459
397 COMMUNICATION EQUIPMENT	877,829	113,298
398 MISCELLANEOUS EQUIPMENT	31,946	47,702
TOTAL GENERAL PLANT	6,832,413	6,617,992
TOTAL DEPRECIABLE PLANT	169,921,020	178,798,670

PENNSYLVANIA POWER COMPANY
 ACCUMULATED DEPRECIATION AND AMORTIZATION
 AS OF DECEMBER 31

ACCOUNT		2014	2015
(1)		(2)	(3)
NONDEPRECIABLE			
302	FRANCHISES AND CONSENTS	772	772
374	DISTRIBUTION PLANT ARO	2,267	2,352
399.1	GENERAL PLANT ARO	20,668	21,479
	TOTAL NONDEPRECIABLE PLANT	23,707	24,603
	TOTAL ELECTRIC PLANT	169,944,727	178,823,273