

Columbia Gas of Pennsylvania, Inc.  
2016 General Rate Case  
Docket No. R-2016-2529660  
Standard Filing Requirements  
Exhibits 109-117  
Volume 7 of 10

**COLUMBIA GAS OF PENNSYLVANIA, INC.**

**53.53 I. VALUATION**

**A. ALL UTILITIES**

3. Provide a description of the depreciation methods utilized in calculating annual depreciation amounts and depreciation reserves, together with a discussion of factors which were considered in arriving at estimates of service life and dispersion by account. Provide dates of all field inspections and facilities visited.

Response: The depreciation methods utilized in calculating annual and accrued depreciation are discussed in Exhibit No. 109 in the section titled "Calculation of Annual and Accrued Depreciation", beginning on page IV-2. The factors considered in arriving at estimates of service life and dispersion by account, begin in the section on page III-2 and the section on page III-8.

Field trips and facilities visited over the years for Columbia Gas of Pennsylvania are presented in Exhibit No.109, in the section "Field Trips", beginning on page III-2.

4. Set forth, in exhibit form, charts depicting the original and estimated survivor curves and a tabular presentation of the original life table plotted on the chart for each account, where the retirement rate method of analysis is utilized.
- a. If any utility plant was excluded from the measures of value because it was deemed not to be "used and useful" in the public service; supply a detailed description of each item of property.
- b. Provide the surviving original cost at test year end by vintage by account and include applicable depreciation reserves and annuities.
- (i) 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 any construction work in progress claims (if applicable).

**Response:** The charts depicting the original and estimated survivor curves, and a tabular presentation of the original life table plotted on the chart for each account where the retirement rate method of analysis is utilized, is presented in Exhibit No. 109 Attachment A in the section beginning on page VI-2.

- a. There were no assets deemed not to be "used or useful" in the depreciation study.
- b. The detailed calculations which set forth the surviving original cost as of November 30, 2016, by vintage by account and including applicable depreciation reserves and accruals begin on page VII-8 of Exhibit No. 109 Attachment A.

The detailed calculations which set forth the surviving original cost as of December 31, 2017, by vintage by account and including applicable depreciation reserves and accruals begins on page II-8 of Exhibit No. 109 Attachment B.

**Columbia Gas<sup>®</sup>  
of Pennsylvania**  
**A NiSource Company**

**2016 DEPRECIATION STUDY**

**CALCULATED ANNUAL DEPRECIATION  
ACCRUALS RELATED TO GAS PLANT  
AS OF NOVEMBER 30, 2016**

*Prepared by:*



*Excellence Delivered As Promised*



**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**Pittsburgh, Pennsylvania**

**2016 DEPRECIATION STUDY**

**CALCULATED ANNUAL DEPRECIATION ACCRUALS  
RELATED TO GAS PLANT  
AS OF NOVEMBER 30, 2016**

**GANNETT FLEMING, INC. – VALUATION AND RATE DIVISION**  
**Camp Hill, Pennsylvania**



**Gannett Fleming**

*Excellence Delivered As Promised*

March 3, 2016

Columbia Gas of Pennsylvania, Inc.  
121 Champion Way, Suite 100  
Canonsburg, PA 15317

Ladies and Gentlemen:

Pursuant to your request, we have determined the annual depreciation accruals applicable to gas plant in service. The results of our study as of November 30, 2016 are presented in the attached report. The results of our study as of November 30, 2015 are presented in our report titled "2015 Depreciation Study- Calculated Annual Depreciation Accruals Related to Gas Plant as of November 30, 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 November 30, 2016.

Respectfully submitted,

GANNETT FLEMING VALUATION  
AND RATE CONSULTANTS, LLC

JOHN J. SPANOS  
Sr. Vice President

JJS:krm

061005



## TABLE OF CONTENTS

<b>PART I. INTRODUCTION.....</b>	<b>I-1</b>
Scope .....	I-2
Basis of the Study .....	I-2
Depreciation and Amortization .....	I-2
Service Life Estimates.....	I-4
Amortization of Net Salvage .....	I-4
<b>PART II. ESTIMATION OF SURVIVOR CURVES .....</b>	<b>II-1</b>
Survivor Curves.....	II-2
Iowa Type Curves .....	II-3
Retirement Rate Method of Analysis.....	II-9
Schedules of Annual Transactions in Plant Records .....	II-10
Schedule of Plant Exposed to Retirement.....	II-14
Original Life Table .....	II-16
Smoothing the Original Survivor Curve .....	II-18
<b>PART III. SERVICE LIFE CONSIDERATIONS .....</b>	<b>III-1</b>
Field Trips .....	III-2
Judgment .....	III-4
<b>PART IV. CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION .....</b>	<b>IV-1</b>
Group Depreciation Procedures.....	IV-2
Remaining Life Annual Accruals .....	IV-3
Average Service Life Procedure.....	IV-3
Equal Life Group Procedure.....	IV-4
Calculation of Annual and Accrued Amortization .....	IV-7
Amortization of Net Salvage .....	IV-9
<b>PART V. RESULTS OF STUDY .....</b>	<b>V-1</b>
Description of Summary Tabulations .....	V-2
Description of Detailed Tabulations .....	V-2
Table 1 <b>Estimated Survivor Curves, Original Cost, Book Reserve  and Calculated Annual Depreciation Accruals Related  to Gas Plant as of November 30, 2016 .....</b>	<b>V-4</b>

**TABLE OF CONTENTS, cont.**

Table 2	Bringforward to November 30, 2016, of the Book Reserve as of November 30, 2015 .....	V-7
Table 3	Calculation of Depreciation Accruals for the Twelve Months Ended November 30, 2016.....	V-9
Table 4	Amortization of Experienced and Estimated Net Salvage .....	V-11
<b>PART VI. SERVICE LIFE STATISTICS .....</b>		<b>VI-1</b>
<b>PART VII. DETAILED DEPRECIATION CALCULATIONS.....</b>		<b>VII-1</b>
	Cumulative Depreciated Original Cost .....	<b>VII-2</b>
	Utility Plant in Service .....	<b>VII-7</b>
<b>PART VIII. EXPERIENCED AND ESTIMATED NET SALVAGE .....</b>		<b>VIII-1</b>

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## PART I. INTRODUCTION

**COLUMBIA GAS OF PENNSYLVANIA, INC.  
DEPRECIATION STUDY**

**PART I. INTRODUCTION**

**SCOPE**

This report sets forth the results of the depreciation study conducted for Columbia Gas of Pennsylvania, Inc. to determine the annual depreciation accrual rates and amounts for ratemaking purposes applicable to the original cost of gas plant as of November 30, 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 2011.

**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 gas 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, the average service life (ASL) procedure for plant installed prior to 1976 and the equal life group (ELG) procedure for 1976 and subsequent vintages. The calculations were based on the attained ages and estimated service life characteristics for each depreciable group of gas 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 2011 from the property records of the Company. Such data included plant additions, retirements, transfers and other activity. Generally, retirement data for the years 1939 through 2011 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 in the Opinion and Order of the Commission at Docket Nos. R-891468 and R-801873.

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## 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

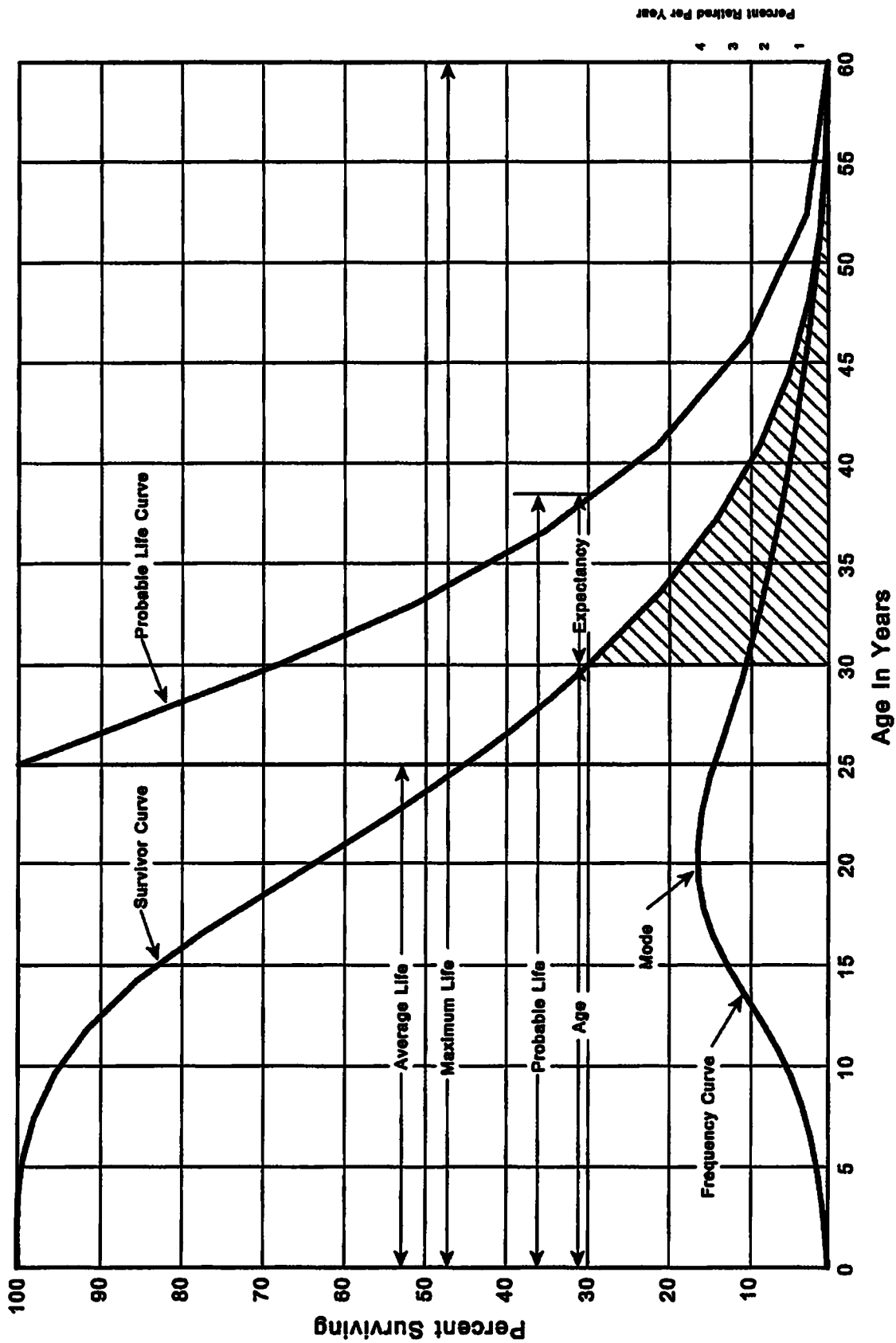


Figure 1. A Typical Survivor Curve and Derived Curves

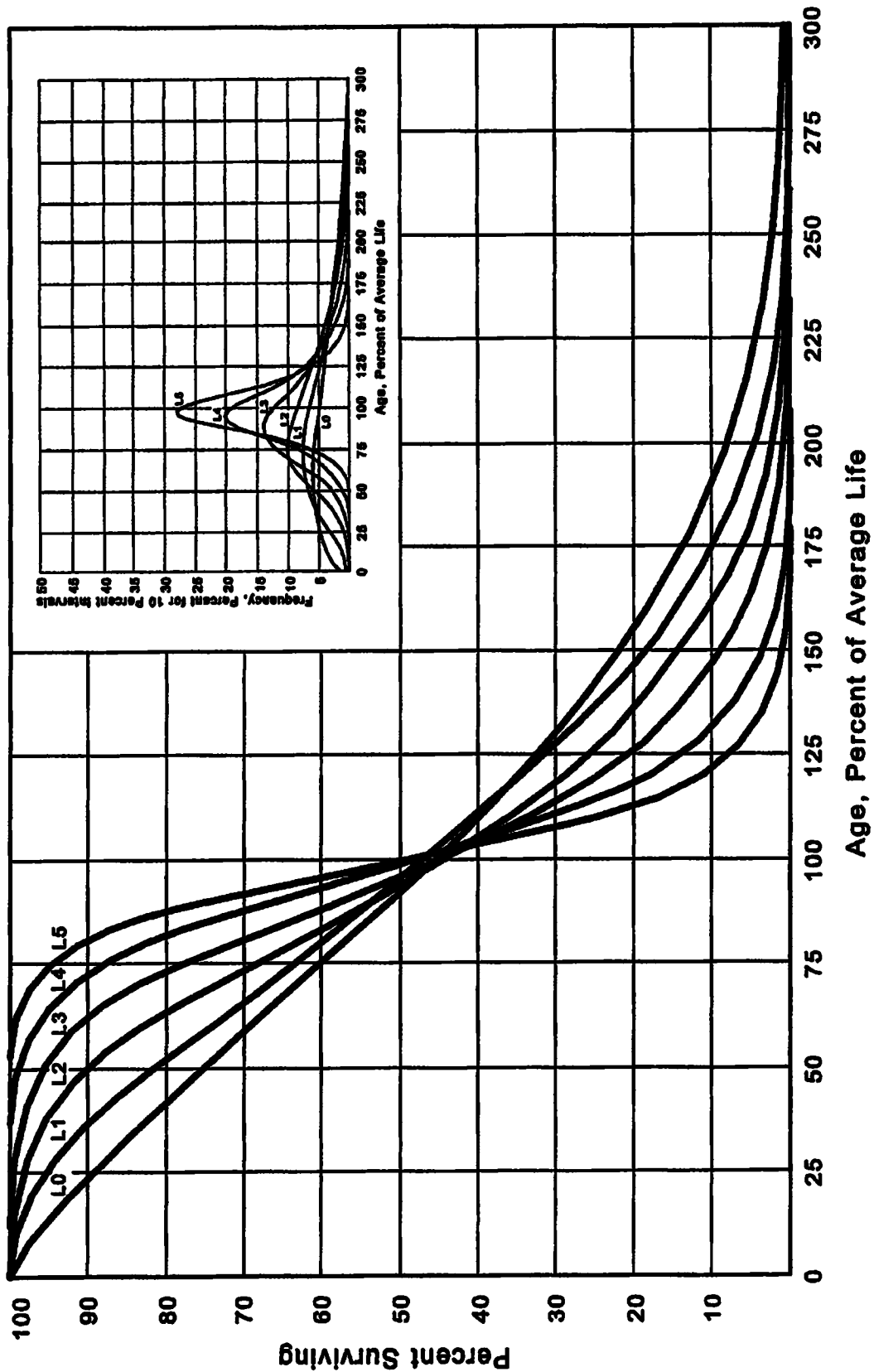


Figure 2. Left Modal or "L" Iowa Type Survivor Curves

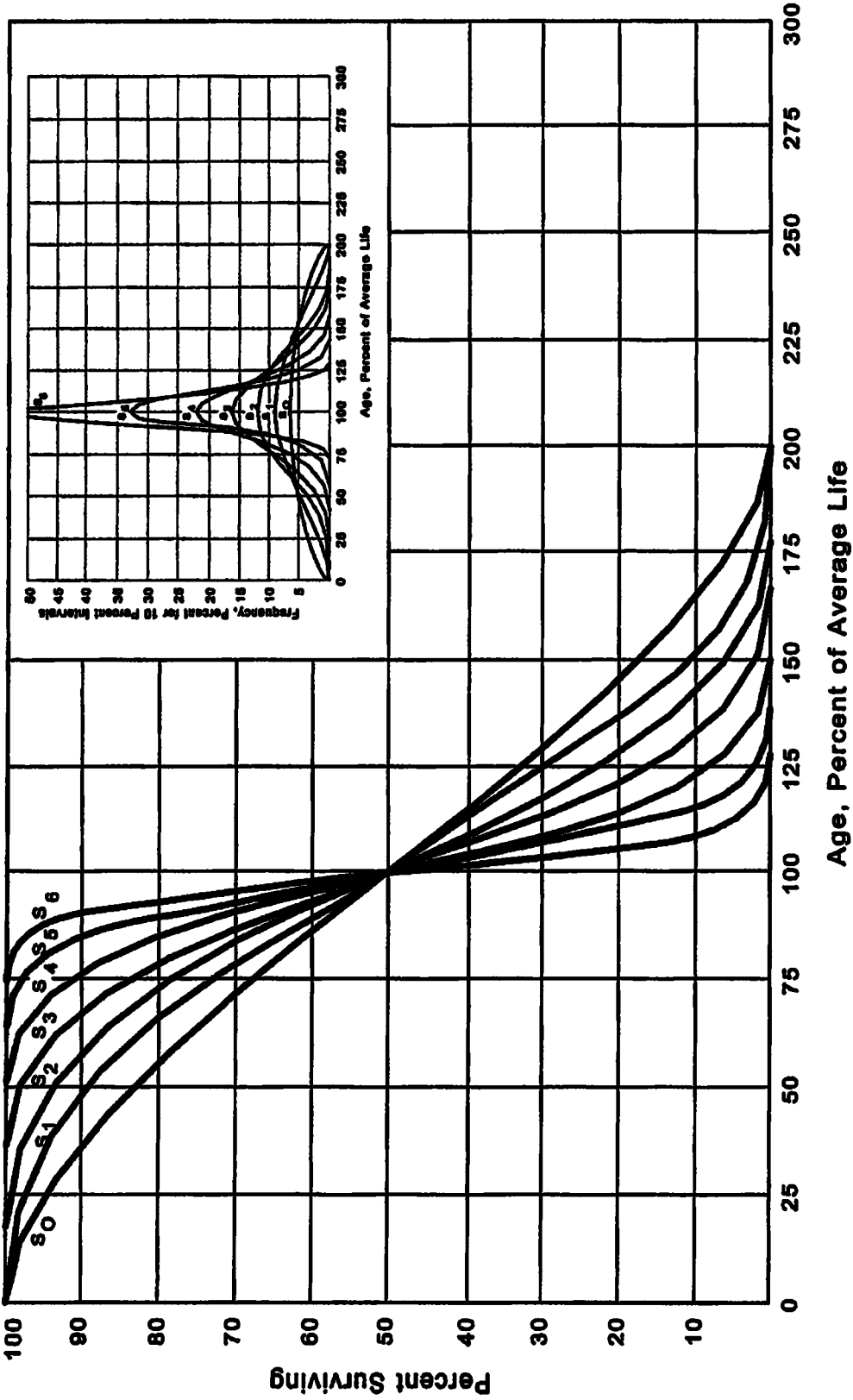


Figure 3. Symmetrical or "S" Iowa Type Survivor Curves

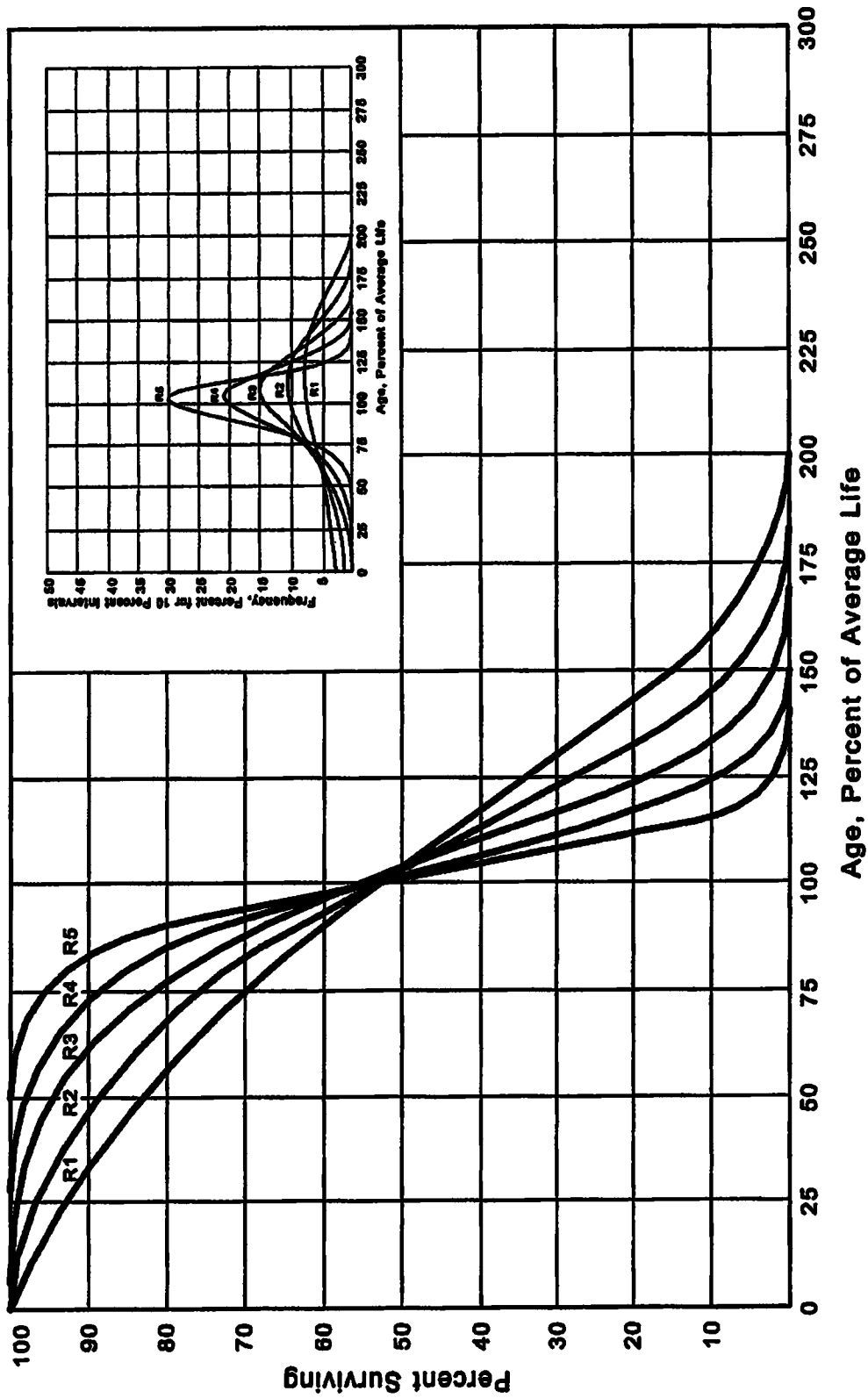


Figure 4. Right Modal or "R" Iowa Type Survivor Curves



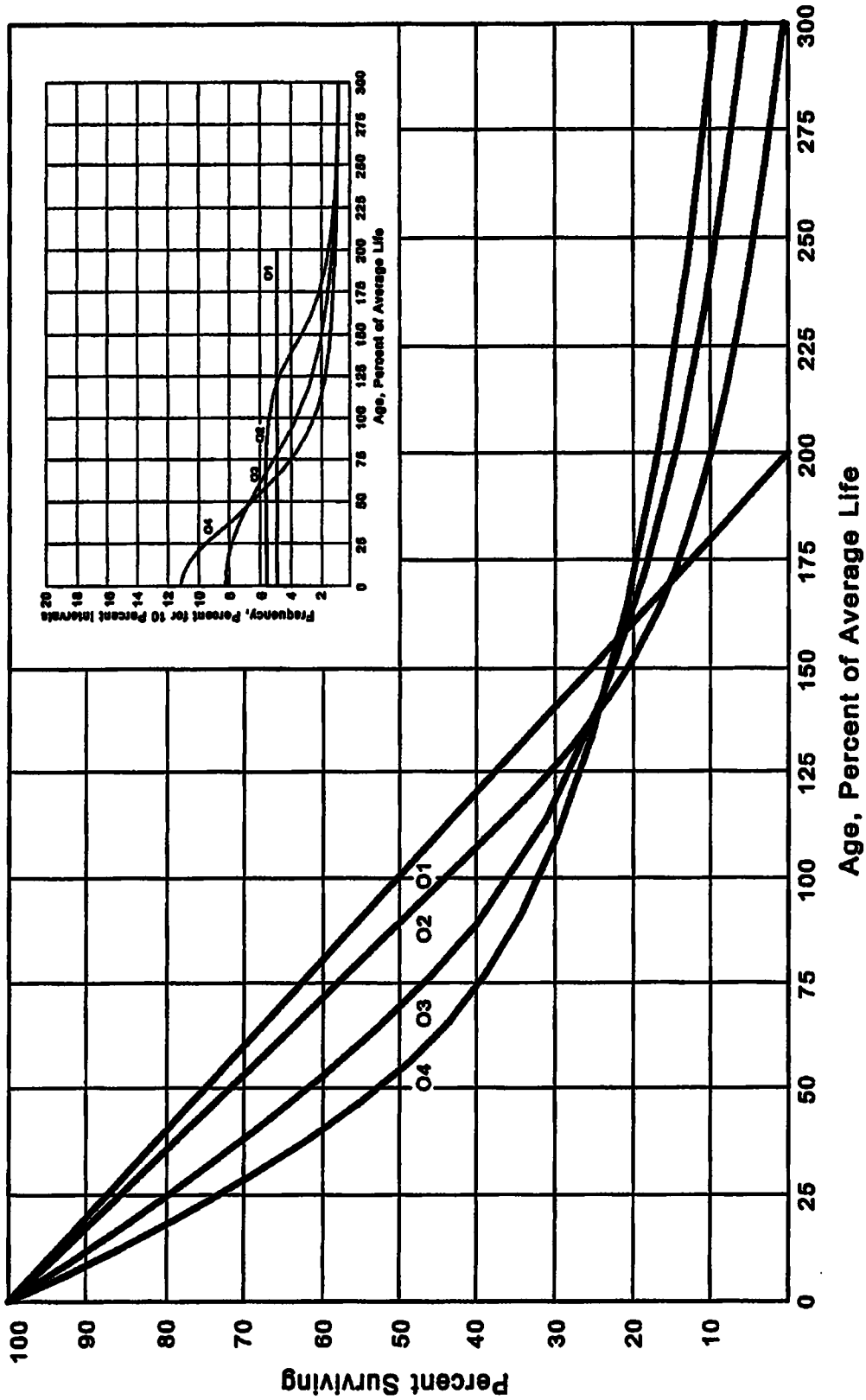


Figure 5. Origin Modal or "O" Iowa Type Survivor Curves

Experiment Station's Bulletin 125.<sup>1</sup> These curve types have also been presented in subsequent Experiment Station bulletins and in the text, "Engineering Valuation and Depreciation."<sup>2</sup> 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

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<sup>1</sup> Winfrey, Robley. Statistical Analyses of Industrial Property Retirements. Iowa State College, Engineering Experiment Station, Bulletin 125. 1935.

<sup>2</sup> Marston, 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,"<sup>3</sup> "Engineering Valuation and Depreciation,"<sup>4</sup> and "Depreciation Systems."<sup>5</sup>

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

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<sup>3</sup>Winfrey, Robley, Supra Note 1.

<sup>4</sup>Marston, Anson, Robley Winfrey, and Jean C. Hempstead, Supra Note 2.

<sup>5</sup>Wolf, 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 (1)	Retirements, Thousands of Dollars										Total During		Age Interval (13)
	During Year										Age Interval (12)		
	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	19	44	12½-13½
2003	11	12	13	14	16	17	19	21	22	18	18	64	11½-12½
2004	8	9	10	11	11	13	14	15	16	17	17	83	10½-11½
2005	9	10	11	12	13	14	16	17	19	20	20	93	9½-10½
2006	4	9	10	11	12	13	14	15	16	20	20	105	8½-9½
2007		5	11	12	13	14	15	16	18	20	20	113	7½-8½
2008			6	12	13	15	16	17	19	19	19	124	6½-7½
2009				6	13	15	16	17	19	19	19	131	5½-6½
2010					7	14	16	17	19	20	20	143	4½-5½
2011						8	18	20	22	23	23	146	3½-4½
2012							9	20	22	25	25	150	2½-3½
2013								11	23	25	25	151	1½-2½
2014									11	24	24	153	½-1½
2015										13	13	80	0-½
<b>Total</b>	<b>53</b>	<b>68</b>	<b>86</b>	<b>106</b>	<b>128</b>	<b>157</b>	<b>196</b>	<b>231</b>	<b>273</b>	<b>308</b>		<b>1,606</b>	

SCHEDULE 2. OTHER TRANSACTIONS FOR EACH YEAR 2006-2015  
SUMMARIZED BY AGE INTERVAL

Experience Band 2006-2015

Placement Band 2001-2015

Year Placed (1)	During Year										Total During Age Interval (12)	Age Interval (13)	
	2006 (2)	2007 (3)	2008 (4)	2009 (5)	2010 (6)	2011 (7)	2012 (8)	2013 (9)	2014 (10)	2015 (11)			
2001	-	-	-	-	-	-	60 <sup>a</sup>	-	-	-	-	-	13½-14½
2002	-	-	-	-	-	-	-	-	-	-	-	-	12½-13½
2003	-	-	-	-	-	-	-	-	-	-	-	-	11½-12½
2004	-	-	-	-	-	-	-	(5) <sup>b</sup>	-	-	-	60	10½-11½
2005	-	-	-	-	-	-	-	6 <sup>a</sup>	-	-	-	-	9½-10½
2006	-	-	-	-	-	-	-	-	-	-	-	(5)	8½-9½
2007	-	-	-	-	-	-	-	-	-	-	-	6	7½-8½
2008	-	-	-	-	-	-	-	-	-	-	-	-	6½-7½
2009	-	-	-	-	-	-	-	(12) <sup>b</sup>	-	-	-	-	5½-6½
2010	-	-	-	-	-	-	-	-	22 <sup>a</sup>	-	-	-	4½-5½
2011	-	-	-	-	-	-	-	(19) <sup>b</sup>	-	-	-	10	3½-4½
2012	-	-	-	-	-	-	-	-	-	-	-	-	2½-3½
2013	-	-	-	-	-	-	-	-	-	(102) <sup>c</sup>	-	(121)	1½-2½
2014	-	-	-	-	-	-	-	-	-	-	-	-	½-1½
2015	-	-	-	-	-	-	-	-	-	-	-	-	0-½
<b>Total</b>	-	-	-	-	-	-	60	(30)	22	(102)	-	(50)	

<sup>a</sup> Transfer Affecting Exposures at Beginning of Year

<sup>b</sup> Transfer Affecting Exposures at End of Year

<sup>c</sup> 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 Beginning of Age Interval		Age Interval (13)
	2006 (2)	2007 (3)	2008 (4)	2009 (5)	2010 (6)	2011 (7)	2012 (8)	2013 (9)	2014 (10)	2015 (11)	2015 (12)	2015 (13)	
2001	255	245	234	222	209	195	239	216	192	167	167	13½-14½	
2002	279	268	256	243	228	212	194	174	153	131	323	12½-13½	
2003	307	296	284	271	257	241	224	205	184	162	531	11½-12½	
2004	338	330	321	311	300	289	276	262	242	226	823	10½-11½	
2005	376	367	357	346	334	321	307	297	280	261	1,097	9½-10½	
2006	420 <sup>a</sup>	416	407	397	386	374	361	347	332	316	1,503	8½-9½	
2007	460 <sup>a</sup>	460 <sup>a</sup>	455	444	432	419	405	390	374	356	1,952	7½-8½	
2008			510 <sup>a</sup>	504	492	479	464	448	431	412	2,463	6½-7½	
2009				580 <sup>a</sup>	574	561	546	530	501	482	3,057	5½-6½	
2010					660 <sup>a</sup>	653	639	623	628	609	3,789	4½-5½	
2011						750 <sup>a</sup>	742	724	685	663	4,332	3½-4½	
2012							850 <sup>a</sup>	841	821	799	4,955	2½-3½	
2013								960 <sup>a</sup>	949	926	5,719	1½-2½	
2014									1,080 <sup>a</sup>	1,069	6,579	½-1½	
2015										1,220 <sup>a</sup>	7,490	0-½	
<b>Total</b>	<b>1,975</b>	<b>2,382</b>	<b>2,824</b>	<b>3,318</b>	<b>3,872</b>	<b>4,494</b>	<b>5,247</b>	<b>6,017</b>	<b>6,852</b>	<b>7,799</b>	<b>44,780</b>		



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)

<u>Age at Beginning of Interval</u> (1)	<u>Exposures at Beginning of Age Interval</u> (2)	<u>Retirements During Age Interval</u> (3)	<u>Retirement Ratio</u> (4)	<u>Survivor Ratio</u> (5)	<u>Percent Surviving at Beginning of 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
<b>Total</b>	<b><u>44,780</u></b>	<b><u>1,606</u></b>			

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

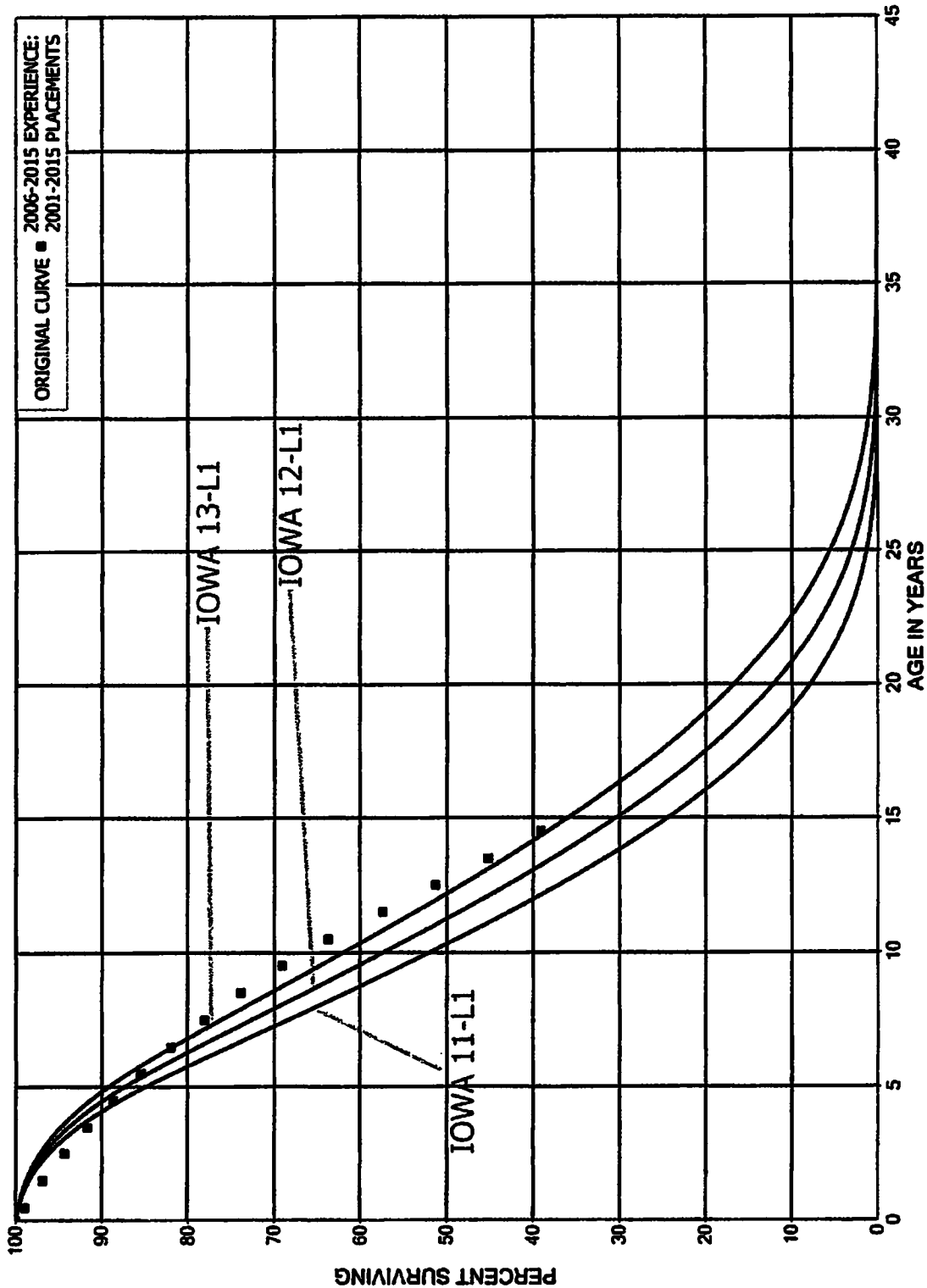


FIGURE 7. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN S0 IOWA TYPE CURVE  
 ORIGINAL AND SMOOTH SURVIVOR CURVES

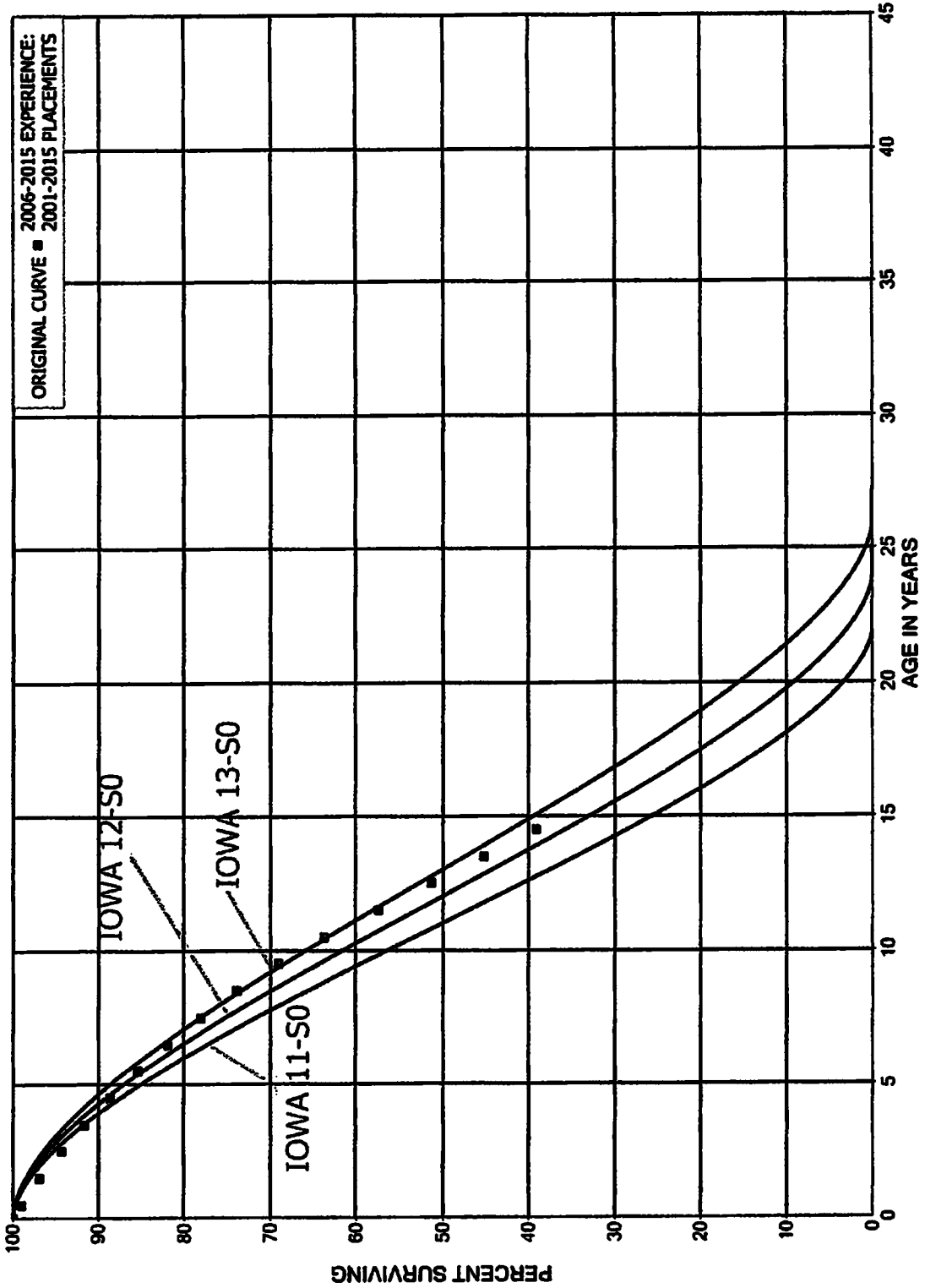


FIGURE 8. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN R1 IOWA TYPE CURVE  
ORIGINAL AND SMOOTH SURVIVOR CURVES

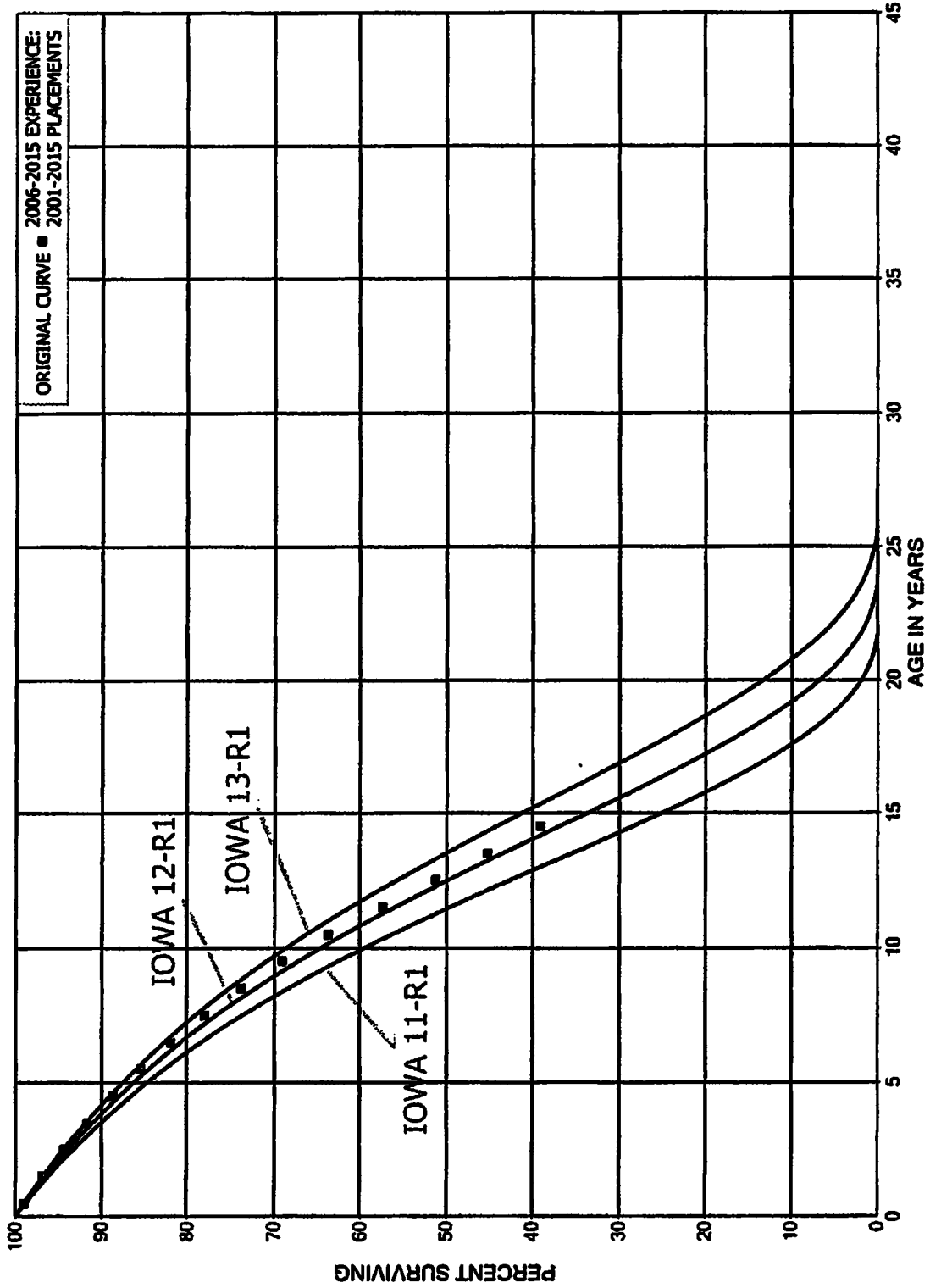
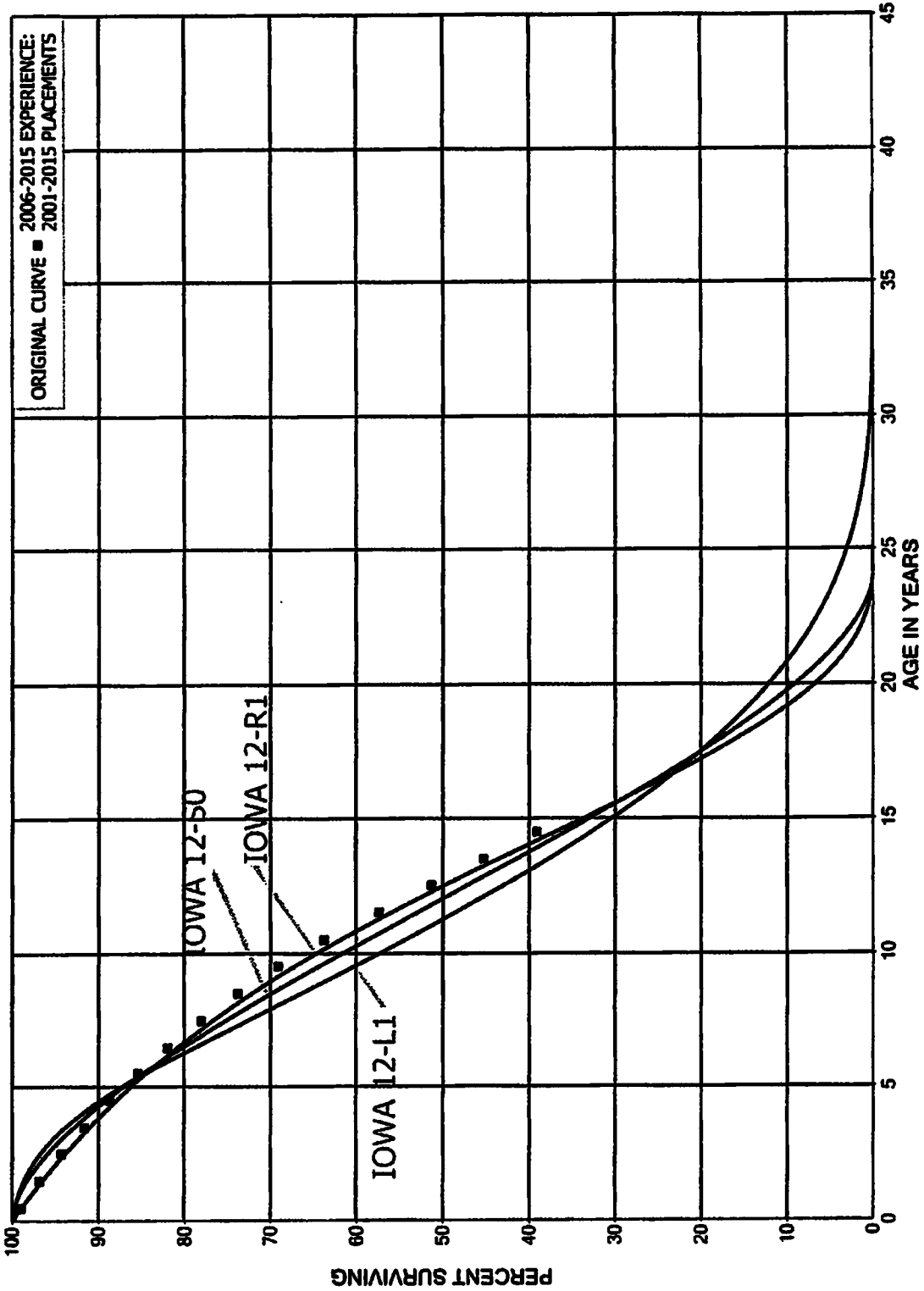


FIGURE 9. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN L1, S0 AND R1 IOWA TYPE CURVE ORIGINAL AND SMOOTH SURVIVOR CURVES





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## **PART III. SERVICE LIFE CONSIDERATIONS**

### **PART III. SERVICE LIFE CONSIDERATIONS**

#### **Field Trips.**

In order to be familiar with the operation of the Company and observe representative portions of the plant, field trips have been conducted periodically. 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 retirements are obtained during these field trips. This knowledge and information were incorporated in the interpretation and extrapolation of the statistical analyses.

During the extensive period of years our firm has been conducting depreciation studies for the Company, the field trips have resulted in numerous reviews of the Company's operating areas. The following is a list of the locations visited during the most recent trips.

#### **July 16, 2012**

Washington Service Center  
E. Wheeling Regulating Station #2916  
Meadow Avenue Regulating Station #391  
Cortez Drive Regulating Station #4082  
Patton School Regulating Station #4289  
Camalloy, Inc. Meter Set  
Uniontown Service Center  
Uniontown Service Center Regulating Station #2522  
Grand Street Regulating Station #2728  
Gerome Manufacturing Meter Set  
Industrial Park Regulating Station #4005

#### **July 23 and 24, 2002**

Washington Service Center  
Washington Training Facility  
Charleroi Service Center (Leased)  
Phoenix Regulating Station  
E. Wheeling Street Regulating Station  
Violet Alley Regulating Station  
Washington Mould Corporation Station  
Trinity High School Regulating Station  
Sears Meter Station  
Dewey Street Station

July 23 and 24, 2002, cont.

Boltz Avenue Regulating Station (Mapleview)  
Corning Glass Regulating Station  
Milford Regulating Station  
Washington Junction Regulating Station  
Broadmoor Regulating Station  
Bethel Park Service Center  
West Liberty Avenue Regulating Station  
Bridgeville Regulating Station  
Mt. Lebanon Office (Leased)

August 4, 1997

York Service Center  
York Warehouse and Regulating Station  
York District and Commercial Office  
Pennsylvania Ave. Regulating Station  
Emigsville Regulating Station  
Caterpillar (Rt. 30) Regulating Station  
Mt. Zion Regulating Station

July 22, 1997

Mt. Lebanon Office (Leased)  
Bethel Park Service Center and Regulating Station  
Washington Junction Regulating Station  
Villa Haven Regulating Station  
Shannon Heights Regulating Station  
Sleepy Hollow Regulating Station  
Willow Avenue Regulating Station  
Heidelberg Regulating Station  
Bridgeville Regulating Station  
Washington Service Center  
Washington Training Facility

November 3, 1992

Washington Service Center  
Washington Engineering Office  
Washington Commercial Office  
Bethel Park Service Center and Regulating Station  
Mt. Lebanon Office (Leased)

November 2, 1992

New Brighton DIS Center  
Blackhawk Storage Compressor Station  
Jeanette Service Center Regulating Station 4089  
Regulating Station 4296 Regulating Station 985

**October 27, 1992**

**York District and Commercial Office  
York Warehouse and Regulating Station  
York Service Center  
Hanover Commercial Office  
Hanover Service Center  
McSherrystown Delone Avenue Regulating Station  
Gettysburg Garage and Regulating Stations**

**Judgment.**

The survivor curve estimates were based on judgment which considered a number of factors. The primary factors were the statistical analyses of data; current Company policies and outlook as determined during the field trips and other conversations with management; and the survivor curve estimates from previous studies of this company and other gas companies.

The statistical analyses resulted in good to excellent indications of the survivor patterns experienced for most of the major accounts. Generally, the estimates of the survivor patterns prior to the period of known retirement data were based on experience bands encompassing the earlier years of the known experience. The estimates of future survivor curves generally were based on experience bands of more recent historical data.

The plant accounts or subaccounts for which the statistical analyses were significant factors in the judgments of the survivor curves are as follows:

- 375 Structures and Improvements**
  - Measuring and Regulating Station**
  - Industrial Measuring and Regulating Station**
  - Other Distribution System**
    - Life Span Group**
    - Continuous Group**
- 376 Mains**
- 378 Measuring and Regulating Station Equipment**
- 380 Services**

- 381 Meters
- 382 Meter Installations
- 383 House Regulators
- 384 House Regulator Installations
- 385 Industrial Measuring and Regulating Station  
Equipment - Other Than Meters
- 387 Other Equipment  
General  
Customer Information Services
- 390 Structures and Improvements - Communications
- 394 Tools, Shop and Garage Equipment - CNG Facilities
- 396 Power Operated Equipment
- 397 Communication Equipment - Telemetry

Account 376, Mains, is the largest plant account and is used to illustrate the manner in which the study was conducted for the groups in the preceding list. Aged retirement and other plant accounting data were compiled for the years 1939 through 2011. These data were coded in the course of the Company's normal recordkeeping according to plant account or property group, type of transaction, year in which the transaction took place, and year in which the gas plant was placed in service. The data were analyzed by the retirement rate method of life analysis. The survivor curve chart for the account is presented on page VI-49 and the life tables for the two experience bands plotted on the chart follow it.

The survivor curve estimate for the experience bands, 1939-2011 and 1977-2011, were the basis for the statistical indications. The Iowa 72-R1.5 survivor curve reasonably represents the first 70 years of the stub survivor curve. In recent years, the rates of retirements of mains have been redistributed, with lesser retirement ratios during earlier age intervals and greater ratios during older age intervals, after age 45.

Discussions with operating and management personnel indicated that corrosion control programs, including the use of plastic for smaller size mains, is the most probable cause of fewer early retirements. In addition, highway and urban renewal

projects have caused relatively few retirements in the Company's service area in recent years, as well as the more frequent decision to repair instead of replace mains. Increased rates of retirement at older ages are anticipated in conjunction with leak detection programs and street improvements. That is, older mains with a history of leaks will be replaced as municipalities perform street improvements in order to avoid the high cost of repair or replacement when repaving is required.

Typical service lives for the mains of other Pennsylvania gas companies range from 55 to 75 years. The Iowa 72-R1.5 survivor curve, at the upper end of the range, is estimated to represent the future, inasmuch as it is a reasonable interpretation of the significant portion of the stub survivor curve and reflects the outlook of management.

The second largest account is Account 380, Services. The survivor curve estimate for this account is based on three experience bands, the overall band, 1939-2011, and two shorter experience bands, 1970-2011 and 1992-2011. As the survivor curve chart illustrates, the 50-R0.5 surviving curves is supported by the statistical analyses. During the 1970's, the rates of service line retirements increased causing the experienced service life to significantly decrease. More recent retirement history indicates the downward trend has ended and there has been a reversal toward a somewhat longer service life parameter. Discussions with operating and management personnel disclosed several reasons for the historical changes. Prior to 1970, the retirement of inactive services often was delayed due to operating practices in effect at that time. Statistical experience prior to the late 1960's would not be as good an indicator for estimating future survivor characteristics in this respect. The effect of urban renewal in the Company's service area during the 1970's caused substantially greater

retirements at earlier ages, but this cause of retirement has not been as important in the more recent past. The principal cause of retirement continues to be deterioration. Therefore, the 50-R0.5 survivor curve is a good indicator of life characteristics for services through age 65.

Similar studies were performed for the remaining significant mass plant accounts. The results of the statistical analyses are presented in account sequence in the report, beginning on page VI-2.

The major structures included in Account 375.7, Structures and Improvements, were separated from the smaller structures for purposes of the study. The major structures group consists of 8 structures or complexes of significant size and of a nature that the life span procedure is appropriate. The life spans assigned to the major structures were typically 50 to 60 years from the date of major installation and varied within this range based on individual circumstances, such as size, condition, type of construction, location, and management's plans. Long-term continued use is planned for most of the major structures.

The Iowa 90-R1 interim survivor curve was judged appropriate for the major structures based on the 1975-2011 interim retirement experience, our observations of the buildings, consideration of the typical presence of facilities which will be retired during the estimated life spans, and a review of the interim survivor curves derived for similar structures of other gas companies.

All of the underground storage plant is located at the Blackhawk storage field. The compressor and auxiliary buildings are small structures constructed of prefabricated steel. The gas is compressed by a 900 horsepower Ingersoll-Rand

compressor. Based on the nature of the storage operation and the plant and equipment at the location, a life span of 65 years, from 1970, was assigned to the installation. The interim survivor curves estimated for the several plant accounts represented at the storage location are based on typical survivor experience for comparable gas plant and retirement experience during the band 1970-2011. Statistical analyses of such experience are included in the report for the storage plant accounts that have had significant retirements.

Generally, the survivor curve estimates for the remainder of the accounts, which comprise a minor portion of the total depreciable original cost, were based on judgments which considered the nature of the plant and equipment, reviews of available historical retirement data, and a general knowledge of the service lives for similar equipment in other gas companies.



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**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 November 30, 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 average service life procedure and 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 12-S1.5 Survivor curve and a November 30, 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., November 30 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 12-S1.5 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... 11-30-2015  
SURVIVOR CURVE.... 12-S1.5

AGE INTERVAL		RETIREMENTS DURING		GROUP ANNUAL	YEAR	SUMMATION	AVERAGE	ANNUAL	ACCRUED
BEG	END	LIFE	INTERVAL	ACCURAL	INST	OF ANNUAL ACCRUALS	PERCENT SURVIVING	FACTOR	FACTOR
(1)	(2)	(3)	(4)	(5)=(4)/(3)	(6)	(7)	(8)	(9)	(10)
0.000	0.917	0.458	0.03874	0.03874000000	2016	9.60407092849	95.820491	0.1002	0.0459
0.917	1.917	1.417	0.26936	0.19009174312	2015	9.88964194524	99.826578	0.0991	0.1404
1.917	2.917	2.417	0.71693	0.29661977658	2014	9.64628618539	99.333431	0.0971	0.2347
2.917	3.917	3.417	1.38010	0.40389230319	2013	9.29603014550	98.284918	0.0946	0.3232
3.917	4.917	4.417	2.24863	0.50908535205	2012	8.83954131788	96.470555	0.0916	0.4046
4.917	5.917	5.417	3.29149	0.60762230017	2011	8.28118749177	93.700494	0.0884	0.4789
5.917	6.917	6.417	4.43616	0.69131369799	2010	7.63171949269	89.836667	0.0850	0.5454
6.917	7.917	7.417	5.60035	0.75506943508	2009	6.90852792616	84.818413	0.0815	0.6045
7.917	8.917	8.417	6.69661	0.79560532256	2008	6.13319054734	78.669936	0.0780	0.6565
8.917	9.917	9.417	7.62294	0.80948709780	2007	5.33064433716	71.510159	0.0745	0.7016
9.917	10.917	10.417	8.30037	0.79681002208	2006	4.52749577722	63.548504	0.0712	0.7417
10.917	11.917	11.417	8.67209	0.75957694666	2005	3.74930229285	55.062277	0.0681	0.7775
11.917	12.917	12.417	8.70153	0.70077554965	2004	3.01912604469	46.375469	0.0651	0.8083
12.917	13.917	13.417	8.38597	0.62502571365	2003	2.35622541304	37.831719	0.0623	0.8359
13.917	14.917	14.417	7.75268	0.53775958937	2002	1.77483276153	29.762294	0.0596	0.8593
14.917	15.917	15.417	6.86360	0.44519686061	2001	1.28335453654	22.454052	0.0572	0.8819
15.917	16.917	16.417	5.79278	0.35285253091	2000	0.88432984078	16.125862	0.0548	0.8997
16.917	17.917	17.417	4.62848	0.26574496182	1999	0.57503109442	10.915231	0.0527	0.9179
17.917	18.917	18.417	3.47537	0.18870445784	1998	0.34780638459	6.863306	0.0507	0.9337
18.917	19.917	19.417	2.41377	0.12431220065	1997	0.19129805534	3.918734	0.0488	0.9475
19.917	20.917	20.417	1.50939	0.07392809913	1996	0.09217790545	1.957154	0.0471	0.9616
20.917	21.917	21.417	0.81149	0.03788999393	1995	0.03626885892	0.796715	0.0455	0.9745
21.917	22.917	22.417	0.32964	0.01470491145	1994	0.00997140623	0.226148	0.0441	0.9886
22.917	23.917	23.417	0.06124	0.00261519409	1993	0.00131135346	0.030708	0.0427	0.9999
23.917	24.000	23.959	0.00009	0.00000375642	1992	0.00000015777	0.000004	0.0394	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 9.88964194524 for 2015 equals one-half of 0.19009174312 plus all of the succeeding figures in column 5. Only eleven-twelfths 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 twelve months, i.e., six months prior to November 30. Inasmuch as the overall calculation is centered on November 30, 2016, the accrual for 2016 installations (during the twelve months) represents only one-half of one year, one-twelfths of the year prior to November 30 plus eleven-twelfths year following November 30. For this reason, 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 12-S1.5 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 November 30, 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 gas 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	20
Equipment	15
Information Systems	5
392, Transportation Equipment - Trailers	15
393, Stores Equipment	20
394, Tools, Shop and Garage Equipment	25
395, Laboratory Equipment	20
397, Communication Equipment	
Telephone	10
398, Miscellaneous Equipment	15

For the purpose of calculating annual amortization amounts as of November 30, 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 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, 2011 through November 30, 2015. The data for the last month of 2015 is based on estimated experience. 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 2011 through 2015 net salvage accrual.

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## 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-11 summarize the results of the depreciation study as of November 30, 2016. Table 1 sets forth, by depreciable group, the estimated survivor curve, original cost, book depreciation reserve as of November 30, 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 November 30, 2016. Table 3 sets forth the calculation of the depreciation accruals for the twelve months ended November 30, 2016. Table 4 presents the annual amortization of experienced and estimated net salvage based on the period 2011 through 2015.

### **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 2011-2015 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 gas 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, 2011-2015, 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-11

COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 1. ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF NOVEMBER 30, 2016

DEPRECIABLE GROUP (1)	SURVIVOR CURVE (2)	ORIGINAL COST AS OF NOVEMBER 30, 2016 (3)	BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	CALCULATED ANNUAL ACCRUAL AMOUNT (6)	CALCULATED RATE (7)=(6)/(3)	COMPOSITE REMAINING LIFE (8)=(5)/(6)
<b>DEPRECIABLE PLANT</b>							
<b>UNDERGROUND STORAGE PLANT</b>							
350.2	RIGHTS-OF-WAY		1,932.08	1	0	-	-
351	COMPRESSOR STATION STRUCTURES	3,190,888.99	1,067,831	2,123,058	250,718	7.86	8.5
	<b>WELLS</b>						
352.01	CONSTRUCTION	799,133.73	799,118	16	2	-	8.0
352.02	EQUIPMENT	168,679.67	168,680	0	0	-	-
	<b>TOTAL ACCOUNT 352</b>	<b>967,813.40</b>	<b>967,798</b>	<b>16</b>	<b>2</b>		
352.1	STORAGE LEASEHOLDS AND RIGHTS	206,940.78	206,932	9	1	-	8.6
353	LINES	405,287.78	405,288	0	0	-	-
354	COMPRESSOR STATION EQUIPMENT	905,914.67	651,798	254,117	30,558	3.37	8.3
355	MEASURING AND REGULATING EQUIPMENT	123,010.01	123,010	0	0	-	-
	<b>TOTAL UNDERGROUND STORAGE PLANT</b>	<b>5,801,787.71</b>	<b>3,424,588</b>	<b>2,377,201</b>	<b>281,279</b>	<b>4.85</b>	
<b>DISTRIBUTION PLANT</b>							
<b>LAND AND LAND RIGHTS</b>							
374.4	LAND RIGHTS	2,584,852.44	657,837	1,927,015	45,002	1.74	42.8
374.5	RIGHTS-OF-WAY	3,239,601.77	1,601,503	1,638,099	42,280	1.31	38.7
	<b>TOTAL ACCOUNT 374</b>	<b>5,824,454.21</b>	<b>2,259,340</b>	<b>3,565,114</b>	<b>87,282</b>	<b>1.50</b>	
<b>STRUCTURES AND IMPROVEMENTS</b>							
375.34	MEASURING AND REGULATING	5,106,606.48	1,327,973	3,778,633	108,422	2.12	34.9
375.6	INDUSTRIAL MEASURING AND REGULATING	87,669.84	73,841	14,029	863	0.98	16.3
375.7	OTHER DISTRIBUTION SYSTEMS	5,411,266.03	1,652,340	3,758,925	180,405	3.33	20.8
	<b>DISTRIBUTION SYSTEM STRUCTURES</b>	<b>2,164,341.48</b>	<b>679,824</b>	<b>1,484,517</b>	<b>70,105</b>	<b>3.24</b>	<b>21.2</b>
	<b>OTHER BUILDINGS</b>	<b>7,575,607.51</b>	<b>2,332,164</b>	<b>5,243,442</b>	<b>250,510</b>	<b>3.31</b>	
	<b>TOTAL ACCOUNT 375.70</b>	<b>16,515.17</b>	<b>6,508</b>	<b>10,007</b>	<b>331</b>	<b>2.00</b>	<b>30.2</b>
375.8	COMMUNICATION STRUCTURES	12,766,399.00	3,740,286	9,046,111	360,126	2.82	
	<b>TOTAL ACCOUNT 375</b>						
376	<b>MAINS</b>						
	<b>CAST IRON</b>	476,305.21	366,588	109,717	14,445	3.03	7.6
	<b>BARE STEEL</b>	61,877,994.11	45,089,901	16,588,093	1,948,603	3.16	8.5
	<b>OTHER</b>	1,190,847,065.69	149,078,343	1,041,768,723	23,702,002	1.99	44.0
	<b>TOTAL ACCOUNT 376</b>	<b>1,253,001,365.01</b>	<b>194,534,832</b>	<b>1,056,466,533</b>	<b>25,665,050</b>	<b>2.05</b>	

COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 1. ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF NOVEMBER 30, 2016

	DEPRECIABLE GROUP (1)	SURVIVOR CURVE (2)	ORIGINAL COST AS OF NOVEMBER 30, 2016 (3)		BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	CALCULATED ANNUAL ACCRUAL RATE (7)=(6)/(3)		COMPOSITE REMAINING LIFE (8)=(5)/(6)
							AMOUNT (6)		
376	MEASURING AND REGULATING EQUIPMENT - GENERAL	45-R0.5	44,038,418.69	10,020,157	34,018,260	1,428,244	3.24	23.8	
379.1	MEASURING AND REGULATING EQUIPMENT - CITY GATE	35-S2.5	141,117.10	93,180	47,937	4,469	3.17	10.7	
380	SERVICES								
	BARE STEEL	50-R0.5	828,931.82	723,963	104,969	14,460	1.74	7.3	
	OTHER	50-R0.5	445,882,035.44	110,812,604	335,049,431	12,680,858	2.84	26.5	
	TOTAL ACCOUNT 380		446,880,967.26	111,536,567	335,154,400	12,875,318	2.84		
381	METERS								
	METERS - AMR	43-S1.5	36,276,474.39	15,673,710	20,602,764	889,711	2.45	23.2	
381.1	METER INSTALLATIONS	15-S2.5	23,619,889.13	8,582,181	15,237,708	1,753,958	7.36	8.7	
382	HOUSE REGULATOR	55-R2.5	36,356,561.47	11,909,425	24,448,136	705,101	1.94	34.7	
383	HOUSE REGULATOR INSTALLATIONS	40-S2	11,380,334.58	3,567,108	7,813,229	284,343	2.59	28.5	
384	INDUSTRIAL MEASURING AND REGULATING EQUIPMENT - OTHER THAN METERS	35-S3	3,884,772.07	2,972,034	882,738	88,770	1.73	13.4	
385	OTHER EQUIPMENT	30-R0.5	6,410,163.24	2,981,725	3,428,438	242,202	3.78	14.2	
387	GENERAL	30-R0.5	133,851.06	75,343	58,508	3,786	2.83	15.5	
387.4	CUSTOMER INFORMATION SERVICES	25-R2.5	4,334,343.11	839,236	3,495,107	214,013	4.94	16.3	
387.5	GPS EQUIPMENT	10-S3	2,605,486.00	363,074	2,242,412	329,884	11.76	7.4	
	TOTAL ACCOUNT 387		7,273,880.17	1,277,553	5,996,027	547,883	7.53		
	TOTAL DISTRIBUTION PLANT		1,887,866,894.32	369,148,196	1,518,718,396	44,720,268	2.37		
	GENERAL PLANT								
390.1	STRUCTURES AND IMPROVEMENTS - COMMUNICATIONS	40-R2.5	120,070.46	85,422	34,648	2,517	2.10	13.8	
391.1	OFFICE FURNITURE AND EQUIPMENT								
	FURNITURE	20-SQ	3,779,932.84	1,791,600	1,988,333	155,057	4.10	12.8	
391.11	EQUIPMENT	15-SQ	24,427.00	13,746	10,681	1,115	4.56	9.6	
391.12	INFORMATION SYSTEMS	5-SQ	3,416,994.58	2,520,633	896,362	305,280	8.93	2.9	
	TOTAL ACCOUNT 391		7,221,354.42	4,325,979	2,885,378	461,452	6.39		
392	TRANSPORTATION EQUIPMENT - TRAILERS	15-SQ	97,532.51	53,268	44,265	13,166	13.50	3.4	
393	STORES EQUIPMENT	20-SQ	16,674.52	16,675	0	0	-	-	
394	TOOLS, SHOP AND GARAGE EQUIPMENT								
	EQUIPMENT	25-SQ	14,131,844.50	5,797,220	8,334,624	528,701	3.73	15.8	
394.12	CNG FACILITIES	12-S1.5	1,953,487.84	1,853,268	212	102	0.01	2.1	
	TOTAL ACCOUNT 394		16,085,342.34	7,750,508	8,334,936	528,803	3.28		

COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 1. ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF NOVEMBER 30, 2016

	DEPRECIABLE GROUP (1)	SURVIVOR CURVE (2)	ORIGINAL COST AS OF NOVEMBER 30, 2016 (3)	BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	CALCULATED		COMPOSITE REMAINING LIFE (6)-(5)/(6)
						ANNUAL AMOUNT (6)	ACCRAUAL RATE (7)-(6)/(3)	
385	LABORATORY EQUIPMENT	20-SQ	50,660.82	35,023	15,638	1,797	3.55	8.7
386	POWER OPERATED EQUIPMENT	12-L3	1,435,492.74	1,367,842	67,651	21,455	1.49	3.2
397.1	COMMUNICATION EQUIPMENT	10-SQ	188,830.82	183,625	5,206	0	-	-
397.5	TELEPHONE	17-R3	1,991,310.60	884,202	1,107,109	221,000	11.10	5.0
	TELEMETERING		2,160,141.42	1,047,827	1,112,315	221,000	10.23	
	TOTAL ACCOUNT 397							
388	MISCELLANEOUS EQUIPMENT	15-SQ	860,520.95	199,269	661,252	57,745	6.71	11.5
	TOTAL GENERAL PLANT		28,047,790.28	14,881,611	13,166,181	1,305,935	4.68	
	SUBTOTAL DEPRECIABLE PLANT		1,921,716,172.31	387,454,395	1,534,261,777	46,307,472	2.41	
	AMORTIZABLE PLANT							
303	MISCELLANEOUS INTANGIBLE PLANT		25,832,411.65	8,753,916	17,078,496	3,055,053	**	
362.1	ENVIRONMENTAL REMEDIATION			(1,686,454)				
374.2	LAND, OTHER DISTRIBUTION SYSTEMS		477,116.40	179,478				
375.71	STRUCTURES AND IMPROVEMENTS - LEASED		4,131,521.17	740,892	3,390,639	348,174	**	
	SUBTOTAL AMORTIZABLE PLANT		30,441,061.22	7,967,822	20,469,136	3,403,227		
	NONDEPRECIABLE PLANT		172,413.08					
	TOTAL GAS PLANT		1,982,329,636.61	395,442,217	1,584,730,912	49,710,899		

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

\*\* Accrual rate based on individual asset amortization.

COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 2. BRINGFORWARD TO NOVEMBER 30, 2016, OF THE BOOK RESERVE AS OF NOVEMBER 30, 2015

ACCOUNT	BOOK RESERVE AS OF NOVEMBER 30, 2015	DEPRECIATION ACCRUALS	AMORTIZATION OF NET SALVAGE	PROJECTED RETIREMENTS	PROJECTED GROSS SALVAGE	PROJECTED COST OF REMOVAL	ACQUISITIONS	ADJUSTMENTS	RESERVE AT END OF PERIOD	BOOK RESERVE AS A PERCENT OF ORIGINAL COST
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
350.20	1,931								1,931	99.94
351.20	815,948	251,761	122						1,067,831	33.46
352.01	789,118								789,118	100.00
352.02	168,680								168,680	100.00
352.10	206,932								206,932	100.00
353.00	405,268								405,268	100.00
354.00	629,878	25,940		4,020					651,798	71.95
355.00	123,010								123,010	100.00
374.40	639,892	42,738	1,584	22,316		2,861			697,837	25.45
374.50	1,595,059	42,720	15				3,709		1,601,503	49.44
375.34	852,297	95,986	20,188	50,286		31,606	441,394		1,327,973	26.00
375.60	72,496	921	224						73,641	84.00
375.70	2,257,451	207,842	1,202	84,359		49,772			2,332,164	30.79
375.80	6,173	335							6,508	39.41
376.00	189,433,106	23,005,452	1,102,118	16,628,412		2,484,282	115,830		194,534,832	15.53
376.00	6,386,761	1,317,320	119,271	232,736		88,182	2,517,723		10,020,157	22.75
378.10	88,433	4,699	48						93,180	66.03
380.00	101,159,515	12,338,290	3,131,522	3,181,854	1,008	1,908,088			111,536,567	24.97
381.00	14,882,010	888,479	(6,964)	100,823					15,673,710	43.21
381.10	6,956,655	1,769,561		44,055					8,962,161	36.03
382.00	11,317,669	682,718	(1)	100,661					11,909,425	32.78
383.00	3,331,440	284,218	11	48,563					3,567,106	31.34
384.00	2,903,241	68,793							2,972,034	76.90
385.00	2,716,955	282,078	40,373	31,084		6,597			2,981,725	46.52
387.00	63,150	6,759	5,434						75,343	56.29
387.40	612,381	226,253	622						839,236	19.36
387.50	63,040	300,034							363,074	12.94
390.10	49,821								49,821	71.14
391.10	1,735,919	68,439					35,801		1,791,600	47.40
391.11	1,114	1,114							13,746	58.27
391.12	1,943,844	578,789		12,757					2,520,633	73.77
392.00	54,631	9,100	(10,463)						53,268	54.62
393.00	16,875								16,875	100.00
394.00	5,310,787	483,504	(86)	6,885					5,797,220	41.02
394.12	1,953,081	186							1,953,268	89.89
395.00	32,343	2,680							35,023	69.13
396.00	1,394,199	13,924	(30,481)						1,367,642	95.27
397.10	307,765	16,288	36	180,488					483,625	0.00
397.50	598,594	85,365	5,411	19,000			212,832		804,202	44.40
398.00	166,586	39,354		6,721					199,269	23.16
	361,823,186	43,138,469	4,380,169	20,734,200	1,008	4,581,376	3,327,089	0	387,454,385	



COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 2. BRINGFORWARD TO NOVEMBER 30, 2016, OF THE BOOK RESERVE AS OF NOVEMBER 30, 2015

ACCOUNT (1)	BOOK RESERVE	DEPRECIATION	AMORTIZATION	PROJECTED	PROJECTED	PROJECTED	PROJECTED	ADJUSTMENTS	RESERVE AT	BOOK RESERVE AS
	AS OF NOVEMBER 30, 2015 (2)	ACCRIUALS (3)	OF NET SALVAGE (4)	GROSS SALVAGE (5)	COST OF REMOVAL (7)	ACQUISITIONS (8)	ADJUSTMENTS (9)	END OF PERIOD (10)	A PERCENT OF ORIGINAL COST (11)	
AMORTIZABLE PLANT										
303.00	7,048,270	2,232,147		526,501	1,303,742				8,753,916	33.89
362.10	(545,874)		163,162						(1,686,494)	
374.20	210,205	32,286	(30,727)	240,097					179,478	37.82
375.71	948,691								740,682	16.91
	<u>7,661,292</u>	<u>2,264,435</u>	<u>132,435</u>	<u>766,598</u>	<u>1,303,742</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>7,967,822</u>	
TOTAL	<u>369,594,478</u>	<u>45,402,934</u>	<u>4,512,624</u>	<u>21,500,798</u>	<u>5,885,118</u>	<u>3,327,069</u>	<u>0</u>	<u>0</u>	<u>385,442,217</u>	

COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 3. CALCULATION OF DEPRECIATION ACCRUALS FOR THE TWELVE MONTHS ENDED NOVEMBER 30, 2016

DEPRECIABLE GROUP		ORIGINAL COST AS OF NOVEMBER 30, 2015	ORIGINAL COST AS OF NOVEMBER 30, 2016	COMPOSITE ACCRUAL RATE	ANNUAL ACCRUAL AMOUNT
(1)		(2)	(3)	(4)	(5)
<b>DEPRECIABLE PLANT</b>					
<b>UNDERGROUND STORAGE PLANT</b>					
350.2	RIGHTS-OF-WAY	1,932	1,932	-	0
351	COMPRESSOR STATION STRUCTURES	3,190,889	3,190,889	7.89	251,761
<b>WELLS</b>					
362.01	CONSTRUCTION	799,134	799,134	-	0
362.02	EQUIPMENT	188,680	188,680	-	0
	<b>TOTAL ACCOUNT 352</b>	<b>967,813</b>	<b>967,813</b>		<b>0</b>
352.1	STORAGE LEASEHOLDS AND RIGHTS	208,941	208,941	-	0
353	LINES	405,268	405,268	-	0
354	COMPRESSOR STATION EQUIPMENT	864,752	905,915	2.93	26,940
355	MEASURING AND REGULATING EQUIPMENT	123,010	123,010	-	0
	<b>TOTAL UNDERGROUND STORAGE PLANT</b>	<b>5,760,826</b>	<b>5,801,788</b>	<b>4.81</b>	<b>277,701</b>
<b>DISTRIBUTION PLANT</b>					
<b>LAND AND LAND RIGHTS</b>					
374.4	LAND RIGHTS	2,356,007	2,584,852	1.73	42,738
374.5	RIGHTS-OF-WAY	3,233,104	3,239,602	1.32	42,720
	<b>TOTAL ACCOUNT 374</b>	<b>5,589,111</b>	<b>5,824,454</b>	<b>1.49</b>	<b>85,458</b>
<b>STRUCTURES AND IMPROVEMENTS</b>					
375.34	MEASURING AND REGULATING	3,619,402	5,106,606	2.20	95,986
375.6	INDUSTRIAL MEASURING AND REGULATING	87,670	87,670	1.05	921
375.7	OTHER DISTRIBUTION SYSTEMS				
	DISTRIBUTION SYSTEM STRUCTURES	4,597,310	5,411,266	2.88	144,123
	OTHER BUILDINGS	1,987,208	2,164,341	3.06	63,619
	<b>TOTAL ACCOUNT 375.70</b>	<b>6,584,519</b>	<b>7,575,908</b>	<b>2.93</b>	<b>207,642</b>
375.8	COMMUNICATION STRUCTURES	16,515	16,515	2.03	336
	<b>TOTAL ACCOUNT 375</b>	<b>10,308,105</b>	<b>12,766,399</b>	<b>2.66</b>	<b>304,864</b>
<b>376 MAINS</b>					
	CAST IRON	531,679	476,305	1.15	5,796
	BARE STEEL	69,144,065	61,677,994	1.33	869,967
	OTHER	1,033,342,815	1,190,847,066	1.99	22,130,689
	<b>TOTAL ACCOUNT 376</b>	<b>1,103,018,559</b>	<b>1,253,001,365</b>	<b>1.95</b>	<b>23,006,452</b>
378	MEASURING AND REGULATING EQUIPMENT - GENERAL	32,549,971	44,038,417	3.44	1,317,320
378.1	MEASURING AND REGULATING EQUIPMENT - CITY GATE	141,117	141,117	3.33	4,699
<b>380 SERVICES</b>					
	BARE STEEL	924,361	826,832	1.85	16,216
	OTHER	406,697,801	445,682,035	2.88	12,320,062
	<b>TOTAL ACCOUNT 380</b>	<b>410,622,162</b>	<b>446,680,967</b>	<b>2.87</b>	<b>12,336,280</b>
<b>381 METERS</b>					
381.1	METERS - AMR	23,368,944	23,818,889	7.50	1,769,581
382	METER INSTALLATIONS	35,055,628	36,358,561	1.94	692,718
383	HOUSE REGULATORS	10,737,767	11,380,335	2.57	284,218
384	HOUSE REGULATOR INSTALLATIONS	3,864,772	3,864,772	1.78	68,793
385	INDUSTRIAL MEASURING AND REGULATING EQUIPMENT - OTHER THAN METERS	8,281,253	6,410,163	4.13	262,078
<b>OTHER EQUIPMENT</b>					
387	GENERAL	133,851	133,851	5.05	6,759
387.4	CUSTOMER INFORMATION SERVICES	4,334,343	4,334,343	5.22	228,253
387.5	GPS EQUIPMENT	2,053,368	2,805,486	12.35	300,034
	<b>TOTAL ACCOUNT 387</b>	<b>6,521,560</b>	<b>7,273,680</b>	<b>7.46</b>	<b>533,046</b>
	<b>TOTAL DISTRIBUTION PLANT</b>	<b>1,683,146,233</b>	<b>1,887,866,694</b>	<b>2.33</b>	<b>41,654,006</b>

COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 3. CALCULATION OF DEPRECIATION ACCRUALS FOR THE TWELVE MONTHS ENDED NOVEMBER 30, 2016

<u>DEPRECIABLE GROUP</u>		<u>ORIGINAL COST AS OF NOVEMBER 30, 2015</u>	<u>ORIGINAL COST AS OF NOVEMBER 30, 2016</u>	<u>COMPOSITE ACCRUAL RATE</u>	<u>ANNUAL ACCRUAL AMOUNT</u>
(1)		(2)	(3)	(4)	(5)
<b>GENERAL PLANT</b>					
390 1	STRUCTURES AND IMPROVEMENTS - COMMUNICATIONS	49,821	120,070	-	0
OFFICE FURNITURE AND EQUIPMENT					
391 1	FURNITURE	2,470,110	3,779,933	2.19	66,438
391.11	EQUIPMENT	24,427	24,427	4.58	1,114
391.12	INFORMATION SYSTEMS	3,416,995	3,416,995	16.88	576,789
	TOTAL ACCOUNT 391	5,911,532	7,221,354	10.69	648,341
392	TRANSPORTATION EQUIPMENT - TRAILERS	97,533	97,533	9.33	9,100
393	STORES EQUIPMENT	16,675	16,675	-	0
TOOLS, SHOP AND GARAGE EQUIPMENT					
394	EQUIPMENT	12,669,024	14,131,845	3.68	463,504
394.12	CNG FACILITIES	1,953,498	1,953,498	0.01	185
	TOTAL ACCOUNT 394	14,642,521	16,085,342	3.19	463,689
395	LABORATORY EQUIPMENT	50,661	50,661	5.29	2,680
396	POWER OPERATED EQUIPMENT	1,435,493	1,435,493	0.97	13,924
COMMUNICATION EQUIPMENT					
397.1	TELEPHONE	329,299	168,831	6.54	16,289
397.5	TELEMETERING	798,398	1,991,311	6.12	85,365
	TOTAL ACCOUNT 397	1,127,697	2,160,141	6.24	101,654
398	MISCELLANEOUS EQUIPMENT	493,217	660,521	5.62	39,394
	TOTAL GENERAL PLANT	23,825,149	28,047,790	5.14	1,306,792
	SUBTOTAL DEPRECIABLE PLANT	1,712,732,007	1,921,716,172	2.37	43,138,499
<b>AMORTIZABLE PLANT</b>					
303	MISCELLANEOUS INTANGIBLE PLANT	22,446,679	25,832,412	*	2,232,147
305	STRUCTURES AND IMPROVEMENTS				
362	GAS HOLDERS				
362.1	ENVIRONMENTAL REMEDIATION				
374.2	LAND, OTHER DISTRIBUTION SYSTEMS	477,118	477,118		
375 71	STRUCTURES AND IMPROVEMENTS - LEASED	1,673,890	4,131,521	*	32,268
389.2	LAND AND LAND RIGHTS - LAND RIGHTS				
	SUBTOTAL AMORTIZABLE PLANT	24,597,887	30,441,051		2,264,435
<b>NONDEPRECIABLE PLANT</b>					
		172,413	172,413		
	TOTAL GAS PLANT	1,737,502,307	1,952,329,637		45,402,934

\* Prorated accruals based on individual asset amortization

COLUMBIA GAS OF PENNSYLVANIA, INC.

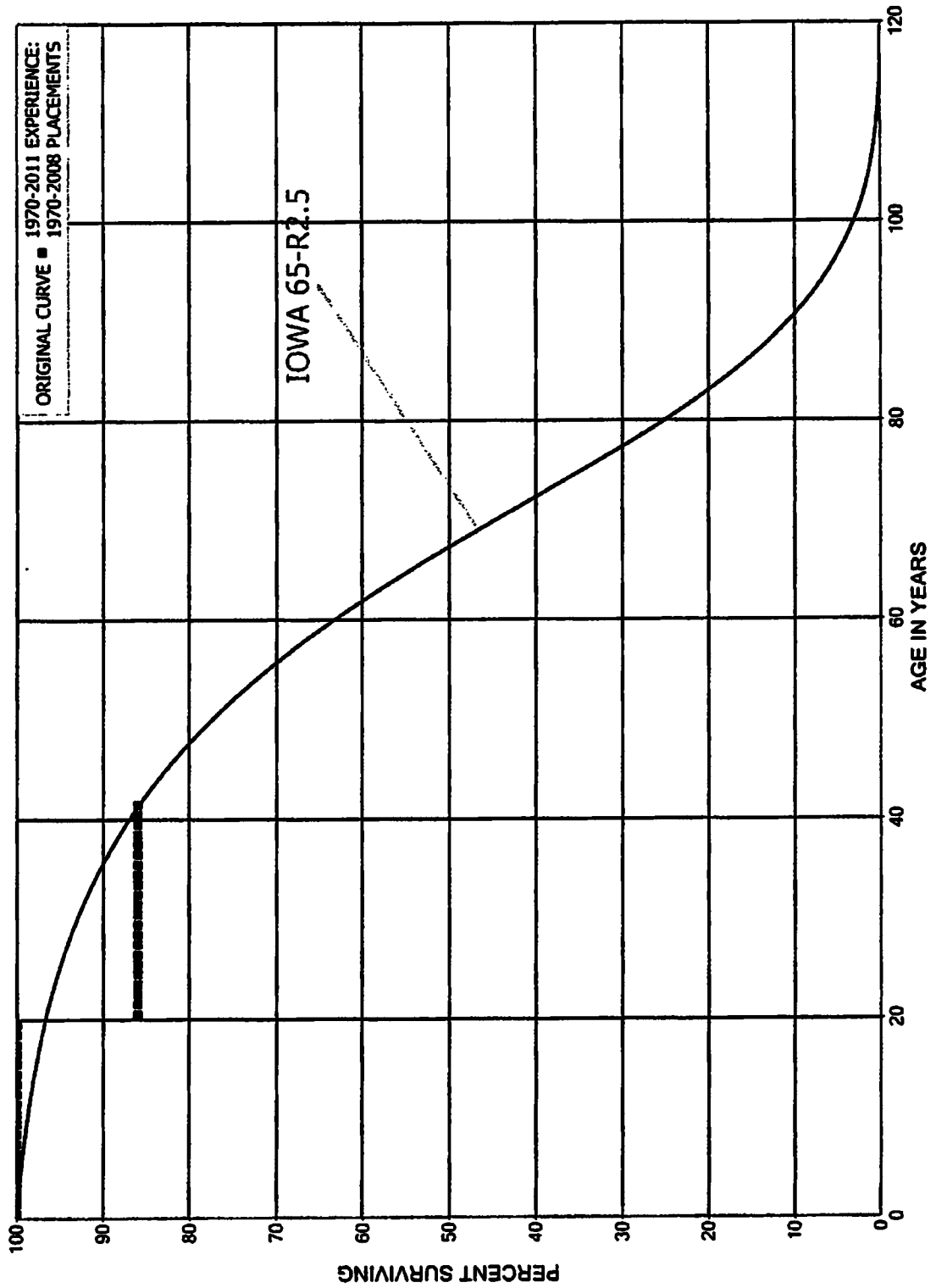
TABLE 4. AMORTIZATION OF EXPERIENCED AND ESTIMATED NET SALVAGE

ACCOUNT (1)	2011		2012		2013		2014		2015		NET SALVAGE (12)	SALVAGE ACCURAL (13)-(12)S
	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)		
361.20					608.48						(608.48)	(122)
362.10	11,780.05		6,457.05		40,486.89		461,688.98		58,875.48		(577,288.45)	(115,480)
374.20			280.16		57,833.75		(211,287.49)				163,633.74	30,727
375.24			17,416.11		4,911.86		21.91		2,938.76		(6,130.79)	(1,829)
375.80	12,279.55				22,427.70		20,874.45		25,529.72		(98,327.53)	(19,886)
375.70			5,103.09		1,081.39						(1,081.39)	(218)
378.00	1,280,063.41	1,541.00	886,996.12		691,743.41	2,051.59	1,281,289.43		22,140.00		(27,243.09)	(5,449)
378.00	59,828.10		18,887.95		216,785.76		185,399.17		1,442,869.23	20,828.00	(5,547,631.01)	(1,109,529)
379.10							91.84		122,225.11		(903,137.09)	(120,827)
380.00	4,313,682.88		2,192,533.99		1,750,828.78		4,890,972.30		2,822,703.18		(15,770,889.13)	(3,154,138)
381.00		759.80	306.85	25,333.32	23.20	6,854.06					32,317.95	6,464
385.00	31,582.63		23,189.35				63,312.71		31,831.17		(201,083.47)	(40,219)
387.00	26,983.46								1,080.39		(26,983.46)	(5,397)
387.40	208.04		59.80		382.50		933.57				(2,650.10)	(500)
392.00		7,201.42									51,683.60	10,337
398.00		43,731.96									148,401.44	28,880
397.50									29,402.58		(29,402.58)	(5,881)
<b>TOTAL</b>	<b>6,725,399.12</b>	<b>83,233.96</b>	<b>3,151,214.27</b>	<b>25,333.32</b>	<b>2,838,119.41</b>	<b>167,787.33</b>	<b>6,483,117.87</b>	<b>0.00</b>	<b>4,857,843.80</b>	<b>20,828.00</b>	<b>(22,580,342.64)</b>	<b>(4,901,089)</b>

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**PART VI. SERVICE LIFE STATISTICS**

COLUMBIA GAS OF PENNSYLVANIA, INC.  
ACCOUNT 351 STRUCTURES AND IMPROVEMENTS  
ORIGINAL AND SMOOTH SURVIVOR CURVES



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 351 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE

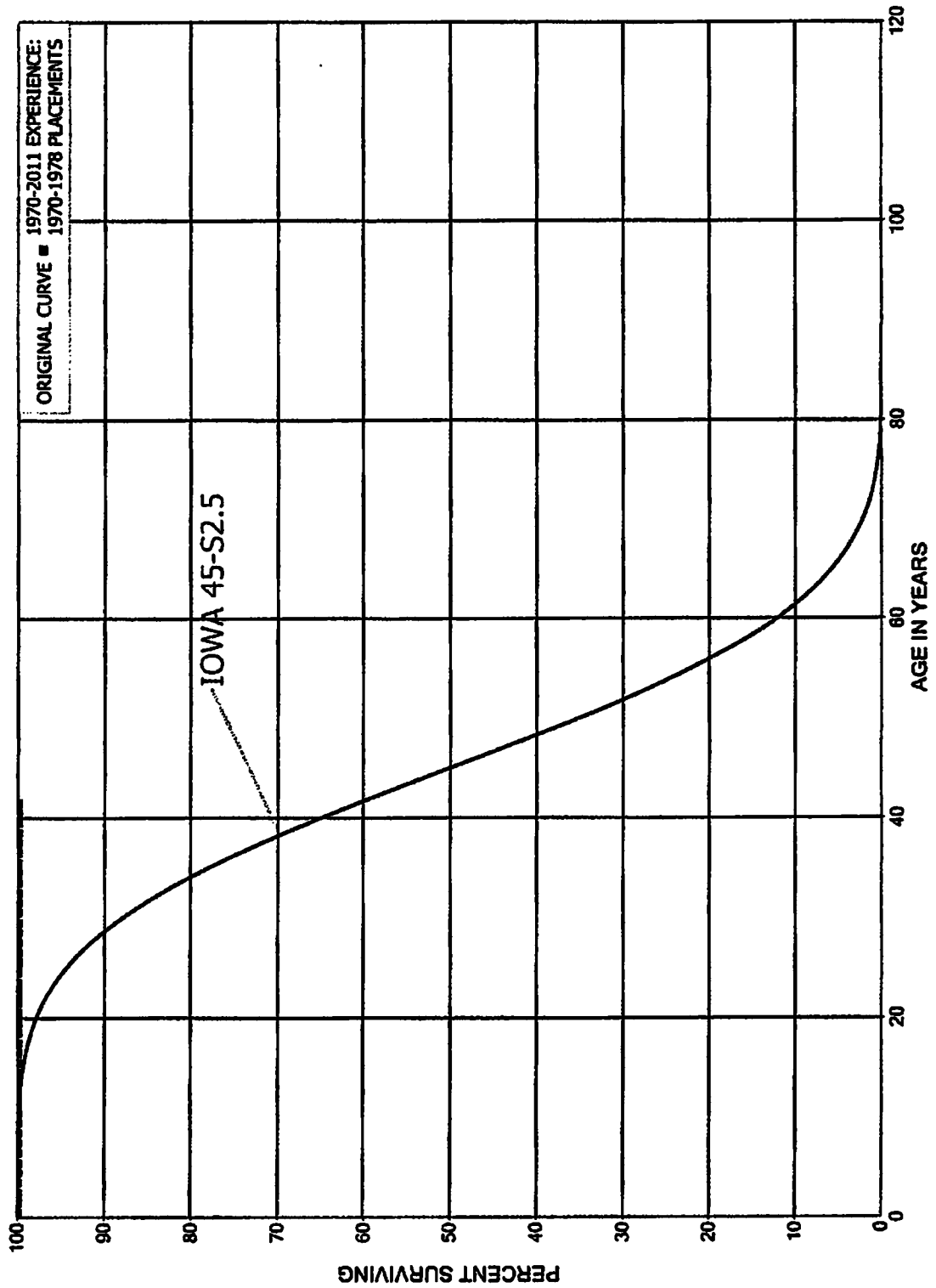
PLACEMENT BAND 1970-2008		EXPERIENCE BAND 1970-2011			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	1,509,979		0.0000	1.0000	100.00
0.5	1,509,979		0.0000	1.0000	100.00
1.5	1,509,979		0.0000	1.0000	100.00
2.5	1,509,979		0.0000	1.0000	100.00
3.5	839,086		0.0000	1.0000	100.00
4.5	839,086		0.0000	1.0000	100.00
5.5	839,086		0.0000	1.0000	100.00
6.5	839,086		0.0000	1.0000	100.00
7.5	643,666		0.0000	1.0000	100.00
8.5	431,518		0.0000	1.0000	100.00
9.5	431,518		0.0000	1.0000	100.00
10.5	343,878		0.0000	1.0000	100.00
11.5	343,878		0.0000	1.0000	100.00
12.5	343,878		0.0000	1.0000	100.00
13.5	336,073		0.0000	1.0000	100.00
14.5	335,141		0.0000	1.0000	100.00
15.5	225,730		0.0000	1.0000	100.00
16.5	225,730		0.0000	1.0000	100.00
17.5	225,730		0.0000	1.0000	100.00
18.5	225,730		0.0000	1.0000	100.00
19.5	225,730	31,647	0.1402	0.8598	100.00
20.5	194,084		0.0000	1.0000	85.98
21.5	194,084		0.0000	1.0000	85.98
22.5	194,084		0.0000	1.0000	85.98
23.5	194,084		0.0000	1.0000	85.98
24.5	194,084		0.0000	1.0000	85.98
25.5	194,084		0.0000	1.0000	85.98
26.5	194,084		0.0000	1.0000	85.98
27.5	194,084		0.0000	1.0000	85.98
28.5	194,084		0.0000	1.0000	85.98
29.5	194,084		0.0000	1.0000	85.98
30.5	194,084		0.0000	1.0000	85.98
31.5	194,084		0.0000	1.0000	85.98
32.5	194,084		0.0000	1.0000	85.98
33.5	194,084		0.0000	1.0000	85.98
34.5	194,084		0.0000	1.0000	85.98
35.5	194,084		0.0000	1.0000	85.98
36.5	194,084		0.0000	1.0000	85.98
37.5	194,084		0.0000	1.0000	85.98
38.5	193,037		0.0000	1.0000	85.98

COLUMBIA GAS OF PENNSYLVANIA, INC.  
 ACCOUNT 351 STRUCTURES AND IMPROVEMENTS  
 ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1970-2008			EXPERIENCE BAND 1970-2011		
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	169,203		0.0000	1.0000	85.98
40.5	124,247		0.0000	1.0000	85.98
41.5					85.98



COLUMBIA GAS OF PENNSYLVANIA, INC.  
ACCOUNT 352 WELLS - EQUIPMENT  
ORIGINAL AND SMOOTH SURVIVOR CURVES



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 352 WELLS - EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1970-1978			EXPERIENCE BAND 1970-2011		
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	168,680		0.0000	1.0000	100.00
0.5	168,680		0.0000	1.0000	100.00
1.5	168,680		0.0000	1.0000	100.00
2.5	168,680		0.0000	1.0000	100.00
3.5	168,680		0.0000	1.0000	100.00
4.5	168,680		0.0000	1.0000	100.00
5.5	168,680		0.0000	1.0000	100.00
6.5	168,680		0.0000	1.0000	100.00
7.5	168,680		0.0000	1.0000	100.00
8.5	168,680		0.0000	1.0000	100.00
9.5	168,680		0.0000	1.0000	100.00
10.5	168,680		0.0000	1.0000	100.00
11.5	168,680		0.0000	1.0000	100.00
12.5	168,680		0.0000	1.0000	100.00
13.5	168,680		0.0000	1.0000	100.00
14.5	168,680		0.0000	1.0000	100.00
15.5	168,680		0.0000	1.0000	100.00
16.5	168,680		0.0000	1.0000	100.00
17.5	168,680		0.0000	1.0000	100.00
18.5	168,680		0.0000	1.0000	100.00
19.5	168,680		0.0000	1.0000	100.00
20.5	168,680		0.0000	1.0000	100.00
21.5	168,680		0.0000	1.0000	100.00
22.5	168,680		0.0000	1.0000	100.00
23.5	168,680		0.0000	1.0000	100.00
24.5	168,680		0.0000	1.0000	100.00
25.5	168,680		0.0000	1.0000	100.00
26.5	168,680		0.0000	1.0000	100.00
27.5	168,680		0.0000	1.0000	100.00
28.5	168,680		0.0000	1.0000	100.00
29.5	168,680		0.0000	1.0000	100.00
30.5	168,680		0.0000	1.0000	100.00
31.5	168,680		0.0000	1.0000	100.00
32.5	168,680		0.0000	1.0000	100.00
33.5	166,398		0.0000	1.0000	100.00
34.5	166,398		0.0000	1.0000	100.00
35.5	166,398		0.0000	1.0000	100.00
36.5	166,398		0.0000	1.0000	100.00
37.5	166,398		0.0000	1.0000	100.00
38.5	166,398		0.0000	1.0000	100.00

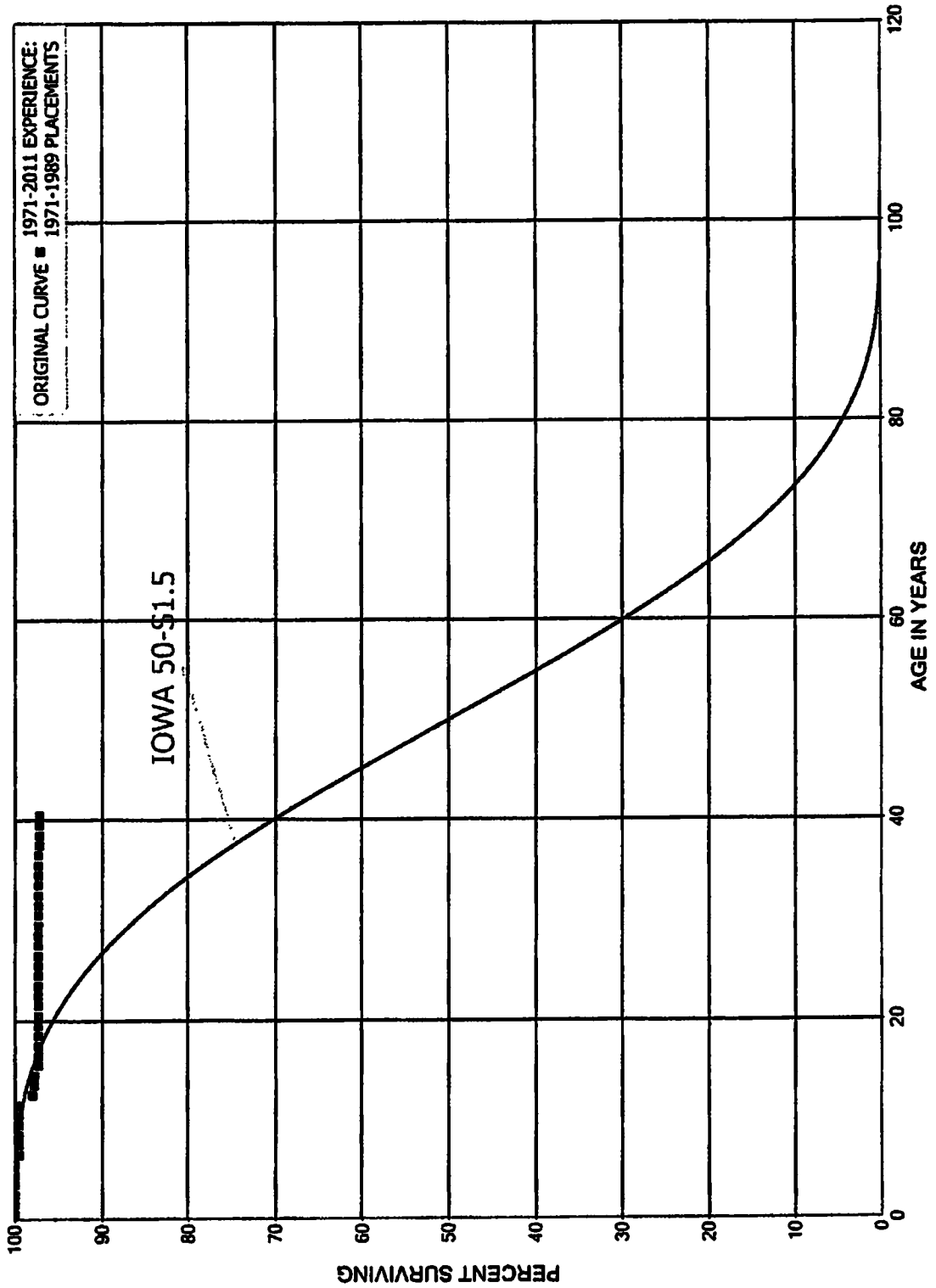
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 352 WELLS - EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1970-1978			EXPERIENCE BAND 1970-2011		
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	124,111		0.0000	1.0000	100.00
40.5	62,707		0.0000	1.0000	100.00
41.5					100.00

COLUMBIA GAS OF PENNSYLVANIA, INC.  
 ACCOUNT 353 LINES  
 ORIGINAL AND SMOOTH SURVIVOR CURVES



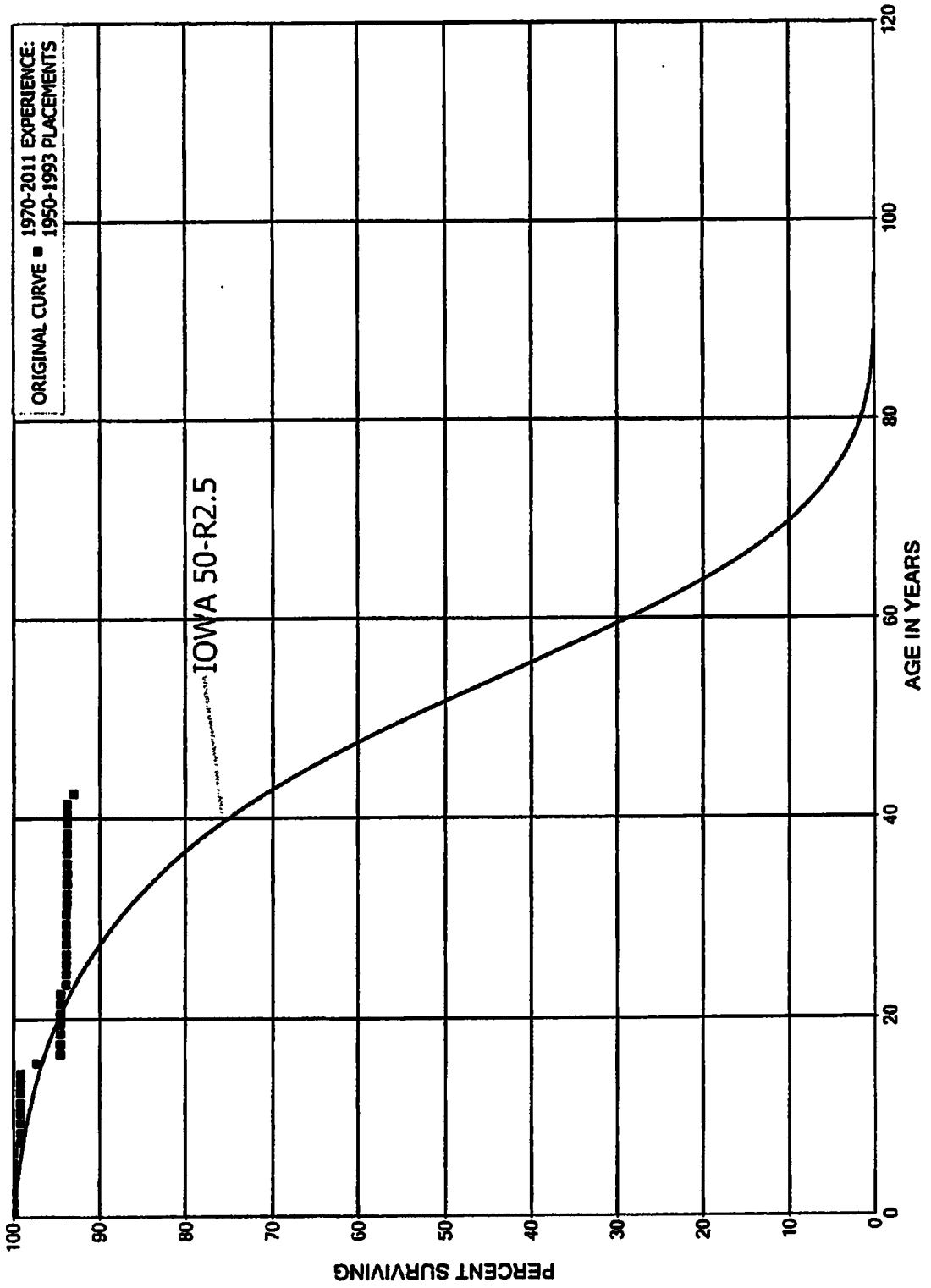
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 353 LINES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1971-1989		EXPERIENCE BAND 1971-2011			
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	417,042		0.0000	1.0000	100.00
0.5	417,042		0.0000	1.0000	100.00
1.5	417,042		0.0000	1.0000	100.00
2.5	417,042		0.0000	1.0000	100.00
3.5	417,042		0.0000	1.0000	100.00
4.5	417,042		0.0000	1.0000	100.00
5.5	417,042	2,179	0.0052	0.9948	100.00
6.5	414,863		0.0000	1.0000	99.48
7.5	414,863		0.0000	1.0000	99.48
8.5	414,863		0.0000	1.0000	99.48
9.5	414,863		0.0000	1.0000	99.48
10.5	414,863		0.0000	1.0000	99.48
11.5	414,863	6,397	0.0154	0.9846	99.48
12.5	408,466	1,075	0.0026	0.9974	97.94
13.5	407,391		0.0000	1.0000	97.69
14.5	407,391	1,842	0.0045	0.9955	97.69
15.5	405,549		0.0000	1.0000	97.24
16.5	405,549		0.0000	1.0000	97.24
17.5	405,549		0.0000	1.0000	97.24
18.5	405,549		0.0000	1.0000	97.24
19.5	405,549		0.0000	1.0000	97.24
20.5	405,549		0.0000	1.0000	97.24
21.5	405,549		0.0000	1.0000	97.24
22.5	391,929		0.0000	1.0000	97.24
23.5	391,929		0.0000	1.0000	97.24
24.5	391,929		0.0000	1.0000	97.24
25.5	391,929		0.0000	1.0000	97.24
26.5	391,929		0.0000	1.0000	97.24
27.5	378,044		0.0000	1.0000	97.24
28.5	378,044		0.0000	1.0000	97.24
29.5	378,044		0.0000	1.0000	97.24
30.5	378,044		0.0000	1.0000	97.24
31.5	378,044		0.0000	1.0000	97.24
32.5	378,044		0.0000	1.0000	97.24
33.5	378,044		0.0000	1.0000	97.24
34.5	378,044		0.0000	1.0000	97.24
35.5	378,044		0.0000	1.0000	97.24
36.5	378,044	261	0.0007	0.9993	97.24
37.5	377,783		0.0000	1.0000	97.18
38.5	322,952		0.0000	1.0000	97.18
39.5	260,327		0.0000	1.0000	97.18
40.5					97.18

COLUMBIA GAS OF PENNSYLVANIA, INC.  
ACCOUNT 354 COMPRESSOR STATION EQUIPMENT  
ORIGINAL AND SMOOTH SURVIVOR CURVES



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 354 COMPRESSOR STATION EQUIPMENT

ORIGINAL LIFE TABLE

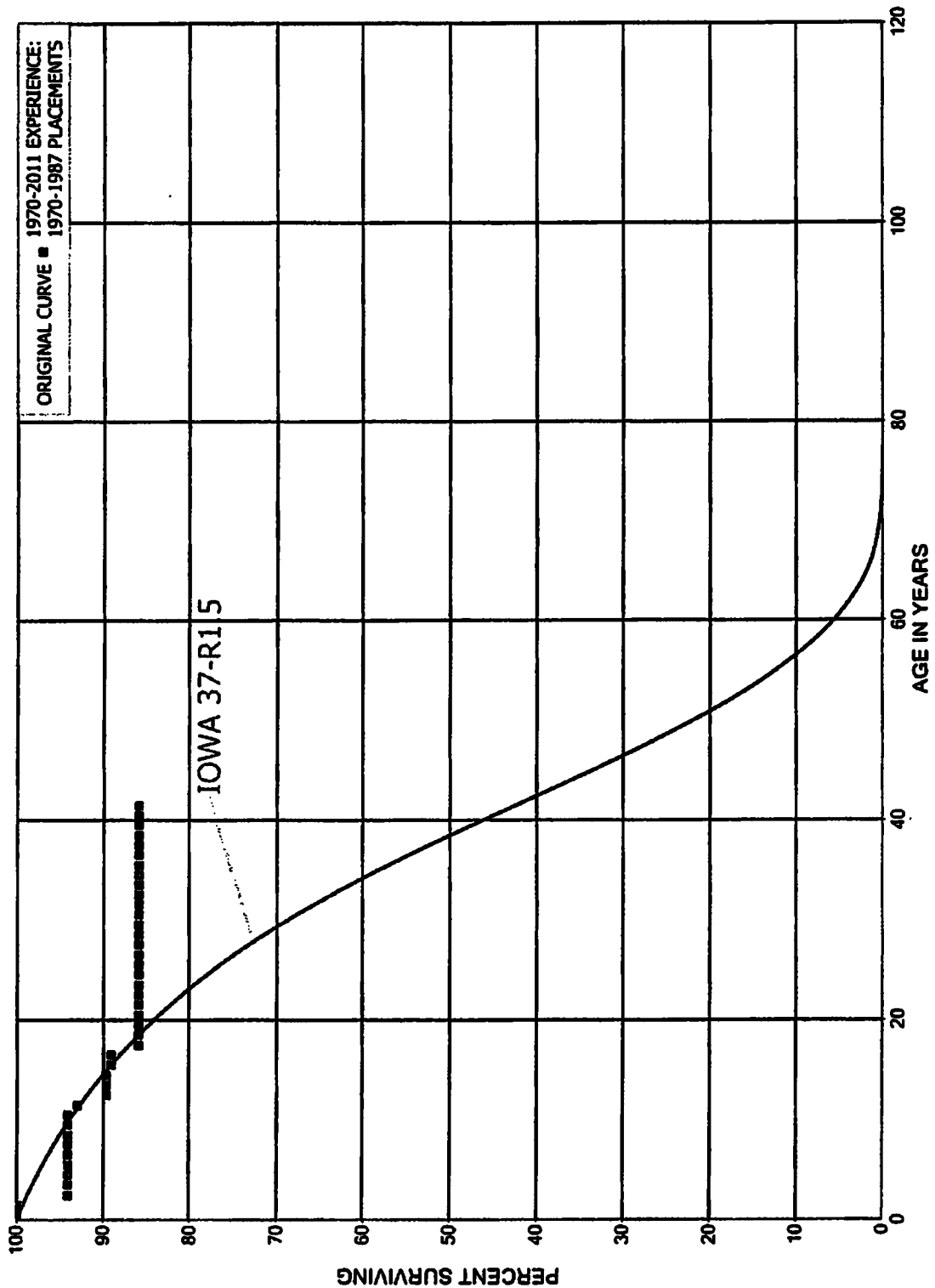
PLACEMENT BAND 1950-1993			EXPERIENCE BAND 1970-2011		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	589,028		0.0000	1.0000	100.00
0.5	591,196		0.0000	1.0000	100.00
1.5	591,196		0.0000	1.0000	100.00
2.5	591,196		0.0000	1.0000	100.00
3.5	591,970		0.0000	1.0000	100.00
4.5	593,145		0.0000	1.0000	100.00
5.5	592,371		0.0000	1.0000	100.00
6.5	592,371	5,135	0.0087	0.9913	100.00
7.5	587,236		0.0000	1.0000	99.13
8.5	587,217		0.0000	1.0000	99.13
9.5	587,217		0.0000	1.0000	99.13
10.5	587,217		0.0000	1.0000	99.13
11.5	587,773		0.0000	1.0000	99.13
12.5	588,136		0.0000	1.0000	99.13
13.5	588,136		0.0000	1.0000	99.13
14.5	588,136	11,211	0.0191	0.9809	99.13
15.5	579,017	16,121	0.0278	0.9722	97.24
16.5	562,897		0.0000	1.0000	94.54
17.5	583,936		0.0000	1.0000	94.54
18.5	582,429		0.0000	1.0000	94.54
19.5	587,771		0.0000	1.0000	94.54
20.5	576,634		0.0000	1.0000	94.54
21.5	576,634		0.0000	1.0000	94.54
22.5	576,486	4,554	0.0079	0.9921	94.54
23.5	569,230		0.0000	1.0000	93.79
24.5	549,562		0.0000	1.0000	93.79
25.5	549,562		0.0000	1.0000	93.79
26.5	549,562		0.0000	1.0000	93.79
27.5	549,562		0.0000	1.0000	93.79
28.5	549,562		0.0000	1.0000	93.79
29.5	549,562		0.0000	1.0000	93.79
30.5	549,562	96	0.0002	0.9998	93.79
31.5	549,466		0.0000	1.0000	93.77
32.5	547,606	278	0.0005	0.9995	93.77
33.5	547,328		0.0000	1.0000	93.73
34.5	547,328		0.0000	1.0000	93.73
35.5	547,328		0.0000	1.0000	93.73
36.5	547,328		0.0000	1.0000	93.73
37.5	547,328		0.0000	1.0000	93.73
38.5	547,328		0.0000	1.0000	93.73

COLUMBIA GAS OF PENNSYLVANIA, INC.  
ACCOUNT 354 COMPRESSOR STATION EQUIPMENT  
ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1950-1993		EXPERIENCE BAND 1970-2011			
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	543,202		0.0000	1.0000	93.73
40.5	521,943		0.0000	1.0000	93.73
41.5	33,216	278	0.0084	0.9916	93.73
42.5	30,771		0.0000	1.0000	92.94
43.5	30,771		0.0000	1.0000	92.94
44.5	29,595		0.0000	1.0000	92.94
45.5	29,595		0.0000	1.0000	92.94
46.5	29,595		0.0000	1.0000	92.94
47.5	29,595		0.0000	1.0000	92.94
48.5	29,595		0.0000	1.0000	92.94
49.5	29,595		0.0000	1.0000	92.94
50.5	29,595		0.0000	1.0000	92.94
51.5	29,595		0.0000	1.0000	92.94
52.5	29,595		0.0000	1.0000	92.94
53.5	29,595		0.0000	1.0000	92.94
54.5	29,231		0.0000	1.0000	92.94
55.5	29,231		0.0000	1.0000	92.94
56.5	29,231		0.0000	1.0000	92.94
57.5	29,231		0.0000	1.0000	92.94
58.5	29,231		0.0000	1.0000	92.94
59.5	5,343		0.0000	1.0000	92.94
60.5	5,343		0.0000	1.0000	92.94
61.5					92.94



COLUMBIA GAS OF PENNSYLVANIA, INC.  
 ACCOUNT 355 MEASURING AND REGULATING EQUIPMENT  
 ORIGINAL AND SMOOTH SURVIVOR CURVES



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 355 MEASURING AND REGULATING EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1970-1987			EXPERIENCE BAND 1970-2011		
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	143,089		0.0000	1.0000	100.00
0.5	143,089		0.0000	1.0000	100.00
1.5	143,089	8,539	0.0597	0.9403	100.00
2.5	134,550		0.0000	1.0000	94.03
3.5	134,550		0.0000	1.0000	94.03
4.5	134,550		0.0000	1.0000	94.03
5.5	134,550		0.0000	1.0000	94.03
6.5	134,550		0.0000	1.0000	94.03
7.5	134,550		0.0000	1.0000	94.03
8.5	134,550		0.0000	1.0000	94.03
9.5	134,550		0.0000	1.0000	94.03
10.5	134,550	1,579	0.0117	0.9883	94.03
11.5	132,971	4,737	0.0356	0.9644	92.93
12.5	128,234		0.0000	1.0000	89.62
13.5	128,234		0.0000	1.0000	89.62
14.5	128,234	801	0.0062	0.9938	89.62
15.5	127,433		0.0000	1.0000	89.06
16.5	127,433	4,423	0.0347	0.9653	89.06
17.5	123,010		0.0000	1.0000	85.97
18.5	123,010		0.0000	1.0000	85.97
19.5	123,010		0.0000	1.0000	85.97
20.5	123,010		0.0000	1.0000	85.97
21.5	123,010		0.0000	1.0000	85.97
22.5	123,010		0.0000	1.0000	85.97
23.5	123,010		0.0000	1.0000	85.97
24.5	120,675		0.0000	1.0000	85.97
25.5	91,185		0.0000	1.0000	85.97
26.5	91,185		0.0000	1.0000	85.97
27.5	91,185		0.0000	1.0000	85.97
28.5	91,185		0.0000	1.0000	85.97
29.5	91,185		0.0000	1.0000	85.97
30.5	77,447		0.0000	1.0000	85.97
31.5	77,447		0.0000	1.0000	85.97
32.5	77,447		0.0000	1.0000	85.97
33.5	77,447		0.0000	1.0000	85.97
34.5	77,447		0.0000	1.0000	85.97
35.5	77,447		0.0000	1.0000	85.97
36.5	74,762		0.0000	1.0000	85.97
37.5	74,762		0.0000	1.0000	85.97
38.5	74,762		0.0000	1.0000	85.97

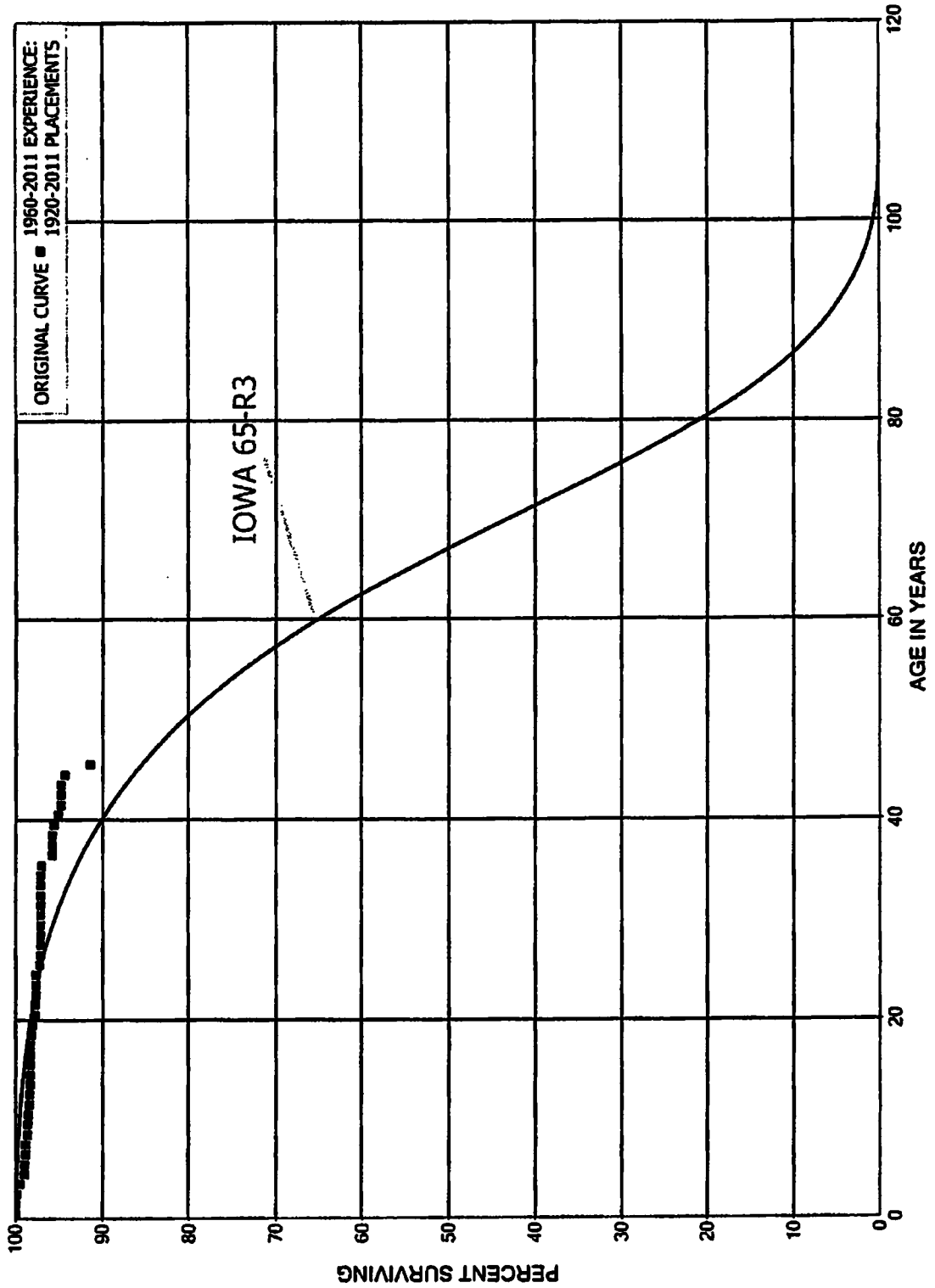
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 355 MEASURING AND REGULATING EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1970-1987			EXPERIENCE BAND 1970-2011		
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	74,762		0.0000	1.0000	85.97
40.5	74,762		0.0000	1.0000	85.97
41.5					85.97

COLUMBIA GAS OF PENNSYLVANIA, INC.  
ACCOUNT 374.4 LAND AND LAND RIGHTS - LAND RIGHTS  
ORIGINAL AND SMOOTH SURVIVOR CURVES



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 374.4 LAND AND LAND RIGHTS - LAND RIGHTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1920-2011			EXPERIENCE BAND 1960-2011			
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	1,872,624	2	0.0000	1.0000	100.00	
0.5	1,832,510		0.0000	1.0000	100.00	
1.5	1,749,358	3,515	0.0020	0.9980	100.00	
2.5	1,590,213	5,207	0.0033	0.9967	99.80	
3.5	1,557,213	8,146	0.0052	0.9948	99.47	
4.5	1,482,091		0.0000	1.0000	98.95	
5.5	1,446,854	2,322	0.0016	0.9984	98.95	
6.5	1,417,359		0.0000	1.0000	98.79	
7.5	1,371,118	3,086	0.0023	0.9977	98.79	
8.5	1,324,697		0.0000	1.0000	98.57	
9.5	1,320,741	1,484	0.0011	0.9989	98.57	
10.5	1,293,557	700	0.0005	0.9995	98.46	
11.5	1,278,638		0.0000	1.0000	98.41	
12.5	1,272,626	884	0.0007	0.9993	98.41	
13.5	1,262,559	301	0.0002	0.9998	98.34	
14.5	1,220,917	25	0.0000	1.0000	98.31	
15.5	1,174,870	23	0.0000	1.0000	98.31	
16.5	1,143,891	427	0.0004	0.9996	98.31	
17.5	1,110,269	510	0.0005	0.9995	98.27	
18.5	1,066,347	2,120	0.0020	0.9980	98.23	
19.5	1,050,761	2,927	0.0028	0.9972	98.03	
20.5	998,587	900	0.0009	0.9991	97.76	
21.5	913,622	182	0.0002	0.9998	97.67	
22.5	782,284		0.0000	1.0000	97.65	
23.5	683,438	150	0.0002	0.9998	97.65	
24.5	617,360	3,174	0.0051	0.9949	97.63	
25.5	570,527	116	0.0002	0.9998	97.13	
26.5	501,100	14	0.0000	1.0000	97.11	
27.5	456,299	42	0.0001	0.9999	97.11	
28.5	416,033		0.0000	1.0000	97.10	
29.5	343,844	76	0.0002	0.9998	97.10	
30.5	303,783		0.0000	1.0000	97.08	
31.5	280,783	63	0.0002	0.9998	97.08	
32.5	243,972		0.0000	1.0000	97.06	
33.5	222,780		0.0000	1.0000	97.06	
34.5	168,266	281	0.0017	0.9983	97.06	
35.5	142,095	1,639	0.0115	0.9885	96.89	
36.5	115,183		0.0000	1.0000	95.78	
37.5	94,991	11	0.0001	0.9999	95.78	
38.5	88,002	287	0.0033	0.9967	95.76	

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 374.4 LAND AND LAND RIGHTS - LAND RIGHTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1920-2011			EXPERIENCE BAND 1960-2011			
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	77,476	311	0.0040	0.9960	95.45	
40.5	55,672	222	0.0040	0.9960	95.07	
41.5	46,888		0.0000	1.0000	94.69	
42.5	34,502		0.0000	1.0000	94.69	
43.5	31,244	127	0.0041	0.9959	94.69	
44.5	19,643	616	0.0314	0.9686	94.30	
45.5	16,630	1	0.0001	0.9999	91.35	
46.5	15,482	2	0.0001	0.9999	91.34	
47.5	11,775		0.0000	1.0000	91.33	
48.5	6,044		0.0000	1.0000	91.33	
49.5	5,720		0.0000	1.0000	91.33	
50.5	4,889		0.0000	1.0000	91.33	
51.5	4,889		0.0000	1.0000	91.33	
52.5	4,889		0.0000	1.0000	91.33	
53.5	4,889		0.0000	1.0000	91.33	
54.5	1,637		0.0000	1.0000	91.33	
55.5	1,637		0.0000	1.0000	91.33	
56.5	1,637		0.0000	1.0000	91.33	
57.5	1,637		0.0000	1.0000	91.33	
58.5	1,635		0.0000	1.0000	91.33	
59.5	1,635		0.0000	1.0000	91.33	
60.5	1,635		0.0000	1.0000	91.33	
61.5	1,635		0.0000	1.0000	91.33	
62.5	1,635		0.0000	1.0000	91.33	
63.5	1,635		0.0000	1.0000	91.33	
64.5	1,635		0.0000	1.0000	91.33	
65.5	1,635		0.0000	1.0000	91.33	
66.5	1,635		0.0000	1.0000	91.33	
67.5	1,635		0.0000	1.0000	91.33	
68.5	1,635		0.0000	1.0000	91.33	
69.5	1,635		0.0000	1.0000	91.33	
70.5	1,635		0.0000	1.0000	91.33	
71.5	1,635		0.0000	1.0000	91.33	
72.5	1,635		0.0000	1.0000	91.33	
73.5	1,635		0.0000	1.0000	91.33	
74.5	1,635		0.0000	1.0000	91.33	
75.5	1,635		0.0000	1.0000	91.33	
76.5	1,635		0.0000	1.0000	91.33	
77.5	1,635		0.0000	1.0000	91.33	
78.5	1,635		0.0000	1.0000	91.33	

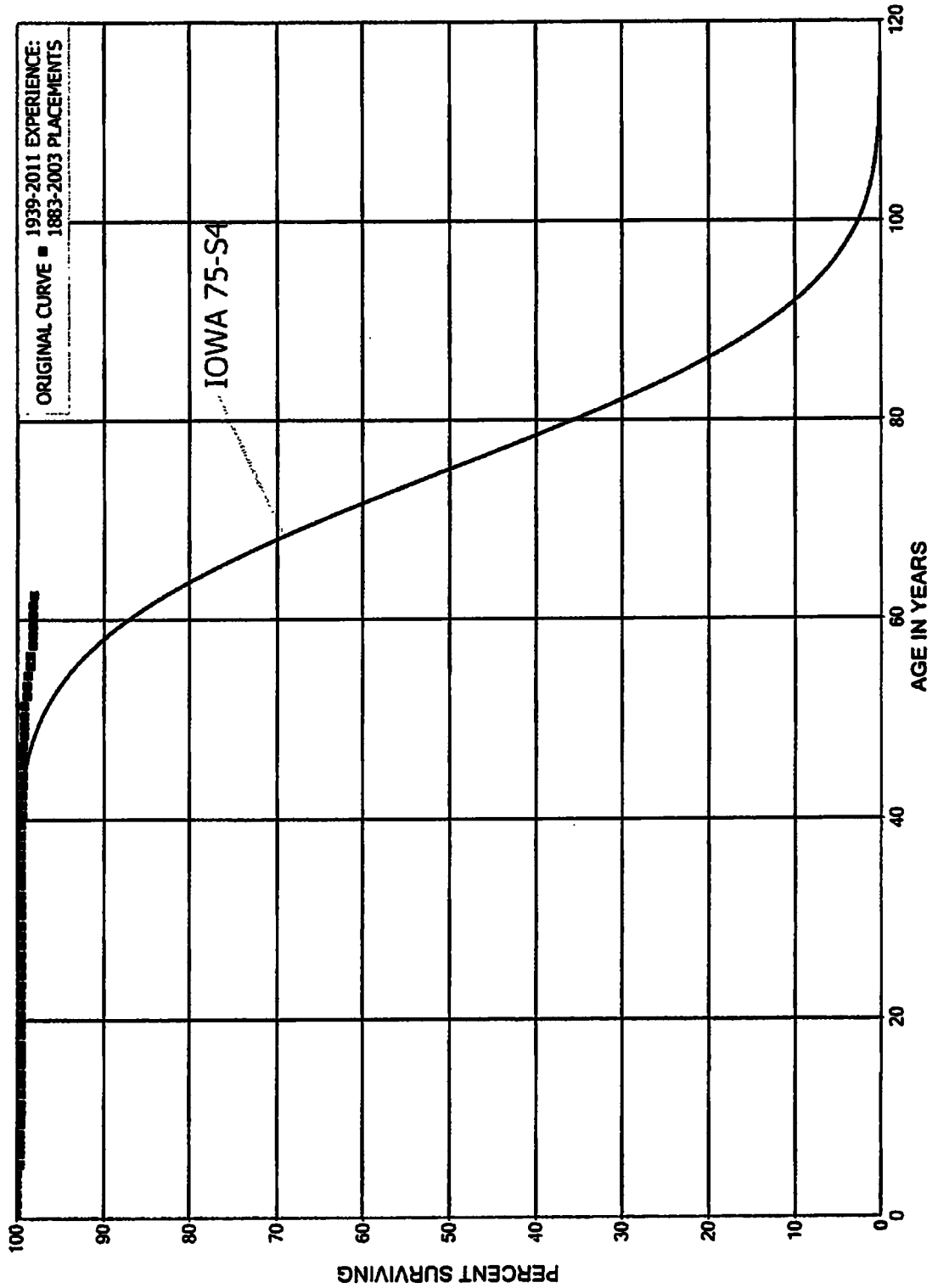
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 374.4 LAND AND LAND RIGHTS - LAND RIGHTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1920-2011			EXPERIENCE BAND 1960-2011		
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	1,635		0.0000	1.0000	91.33
80.5	1,635		0.0000	1.0000	91.33
81.5	1,635		0.0000	1.0000	91.33
82.5	1,635		0.0000	1.0000	91.33
83.5	1,635		0.0000	1.0000	91.33
84.5	1,635		0.0000	1.0000	91.33
85.5	1,635		0.0000	1.0000	91.33
86.5	1,635		0.0000	1.0000	91.33
87.5	1,635		0.0000	1.0000	91.33
88.5	1,635		0.0000	1.0000	91.33
89.5	1,635		0.0000	1.0000	91.33
90.5	1,635		0.0000	1.0000	91.33
91.5					91.33

COLUMBIA GAS OF PENNSYLVANIA, INC.  
ACCOUNT 374.5 LAND AND LAND RIGHTS - RIGHTS-OF-WAY  
ORIGINAL AND SMOOTH SURVIVOR CURVES





COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 374.5 LAND AND LAND RIGHTS - RIGHTS-OF-WAY

ORIGINAL LIFE TABLE

PLACEMENT BAND 1883-2003			EXPERIENCE BAND 1939-2011		
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	2,668,549	729	0.0003	0.9997	100.00
0.5	2,673,820		0.0000	1.0000	99.97
1.5	2,685,199	182	0.0001	0.9999	99.97
2.5	2,717,673	6	0.0000	1.0000	99.97
3.5	2,748,798		0.0000	1.0000	99.97
4.5	2,769,173	10,591	0.0038	0.9962	99.97
5.5	2,779,412	486	0.0002	0.9998	99.58
6.5	2,793,377	29	0.0000	1.0000	99.57
7.5	2,864,334		0.0000	1.0000	99.56
8.5	2,898,615	223	0.0001	0.9999	99.56
9.5	2,727,157	124	0.0000	1.0000	99.56
10.5	2,701,106	5	0.0000	1.0000	99.55
11.5	2,688,601		0.0000	1.0000	99.55
12.5	2,689,706	106	0.0000	1.0000	99.55
13.5	2,652,621		0.0000	1.0000	99.55
14.5	2,596,568	1	0.0000	1.0000	99.55
15.5	2,471,605		0.0000	1.0000	99.55
16.5	1,886,886	130	0.0001	0.9999	99.55
17.5	1,708,314	88	0.0001	0.9999	99.54
18.5	1,651,289	141	0.0001	0.9999	99.54
19.5	1,598,485		0.0000	1.0000	99.53
20.5	1,565,973		0.0000	1.0000	99.53
21.5	1,528,928		0.0000	1.0000	99.53
22.5	1,460,180		0.0000	1.0000	99.53
23.5	1,451,412		0.0000	1.0000	99.53
24.5	1,424,388		0.0000	1.0000	99.53
25.5	1,420,311		0.0000	1.0000	99.53
26.5	1,351,121		0.0000	1.0000	99.53
27.5	1,325,550		0.0000	1.0000	99.53
28.5	1,302,542	38	0.0000	1.0000	99.53
29.5	1,257,090	142	0.0001	0.9999	99.53
30.5	1,205,496		0.0000	1.0000	99.51
31.5	1,181,947	271	0.0002	0.9998	99.51
32.5	1,158,499	5	0.0000	1.0000	99.49
33.5	1,136,530	35	0.0000	1.0000	99.49
34.5	1,099,220	46	0.0000	1.0000	99.49
35.5	1,058,960		0.0000	1.0000	99.48
36.5	1,008,283	171	0.0002	0.9998	99.48
37.5	973,050	163	0.0002	0.9998	99.47
38.5	952,928		0.0000	1.0000	99.45

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 374.5 LAND AND LAND RIGHTS - RIGHTS-OF-WAY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1883-2003			EXPERIENCE BAND 1939-2011			
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	874,431	136	0.0002	0.9998	99.45	
40.5	825,150	72	0.0001	0.9999	99.43	
41.5	784,977	435	0.0006	0.9994	99.43	
42.5	741,799	807	0.0011	0.9989	99.37	
43.5	659,231	4	0.0000	1.0000	99.26	
44.5	569,746	118	0.0002	0.9998	99.26	
45.5	552,943	7	0.0000	1.0000	99.24	
46.5	537,061	6	0.0000	1.0000	99.24	
47.5	499,829	142	0.0003	0.9997	99.24	
48.5	475,361	44	0.0001	0.9999	99.21	
49.5	464,620	91	0.0002	0.9998	99.20	
50.5	452,815	33	0.0001	0.9999	99.18	
51.5	427,100	1,697	0.0040	0.9960	99.18	
52.5	400,152	1	0.0000	1.0000	98.78	
53.5	341,151	21	0.0001	0.9999	98.78	
54.5	331,615	863	0.0026	0.9974	98.77	
55.5	286,173	49	0.0002	0.9998	98.52	
56.5	264,634	827	0.0031	0.9969	98.50	
57.5	249,552	1	0.0000	1.0000	98.19	
58.5	259,741	12	0.0000	1.0000	98.19	
59.5	262,065	2	0.0000	1.0000	98.19	
60.5	259,905	84	0.0003	0.9997	98.19	
61.5	244,918	123	0.0005	0.9995	98.16	
62.5	232,760		0.0000	1.0000	98.11	
63.5	232,275		0.0000	1.0000	98.11	
64.5	233,780		0.0000	1.0000	98.11	
65.5	235,985	285	0.0012	0.9988	98.11	
66.5	236,989		0.0000	1.0000	97.99	
67.5	239,511		0.0000	1.0000	97.99	
68.5	246,270	203	0.0008	0.9992	97.99	
69.5	239,478	69	0.0003	0.9997	97.91	
70.5	240,455	14	0.0001	0.9999	97.88	
71.5	232,475	282	0.0012	0.9988	97.87	
72.5	232,001	72	0.0003	0.9997	97.76	
73.5	239,567	200	0.0008	0.9992	97.73	
74.5	239,023		0.0000	1.0000	97.64	
75.5	235,105		0.0000	1.0000	97.64	
76.5	238,926	182	0.0008	0.9992	97.64	
77.5	234,914	2	0.0000	1.0000	97.57	
78.5	232,372	40	0.0002	0.9998	97.57	

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 374.5 LAND AND LAND RIGHTS - RIGHTS-OF-WAY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1883-2003			EXPERIENCE BAND 1939-2011		
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	230,329		0.0000	1.0000	97.55
80.5	225,633	136	0.0006	0.9994	97.55
81.5	221,752	233	0.0010	0.9990	97.49
82.5	211,783	2	0.0000	1.0000	97.39
83.5	208,165	3	0.0000	1.0000	97.39
84.5	204,720		0.0000	1.0000	97.39
85.5	201,030		0.0000	1.0000	97.39
86.5	192,894	46	0.0002	0.9998	97.39
87.5	189,886		0.0000	1.0000	97.37
88.5	184,128		0.0000	1.0000	97.37
89.5	178,629		0.0000	1.0000	97.37
90.5	176,242		0.0000	1.0000	97.37
91.5	175,126		0.0000	1.0000	97.37
92.5	174,413		0.0000	1.0000	97.37
93.5	173,443		0.0000	1.0000	97.37
94.5	170,390		0.0000	1.0000	97.37
95.5	168,256		0.0000	1.0000	97.37
96.5	158,957		0.0000	1.0000	97.37
97.5	152,435		0.0000	1.0000	97.37
98.5	148,235		0.0000	1.0000	97.37
99.5	146,645		0.0000	1.0000	97.37
100.5	144,840		0.0000	1.0000	97.37
101.5	143,895		0.0000	1.0000	97.37
102.5	138,317		0.0000	1.0000	97.37
103.5	133,232		0.0000	1.0000	97.37
104.5	128,913		0.0000	1.0000	97.37
105.5	123,086		0.0000	1.0000	97.37
106.5	109,875		0.0000	1.0000	97.37
107.5	101,432		0.0000	1.0000	97.37
108.5	85,985		0.0000	1.0000	97.37
109.5	78,655		0.0000	1.0000	97.37
110.5	63,427		0.0000	1.0000	97.37
111.5	55,241		0.0000	1.0000	97.37
112.5	54,307		0.0000	1.0000	97.37
113.5	52,673		0.0000	1.0000	97.37
114.5	50,406		0.0000	1.0000	97.37
115.5	46,145		0.0000	1.0000	97.37
116.5	45,012		0.0000	1.0000	97.37
117.5	43,395		0.0000	1.0000	97.37
118.5	42,744		0.0000	1.0000	97.37

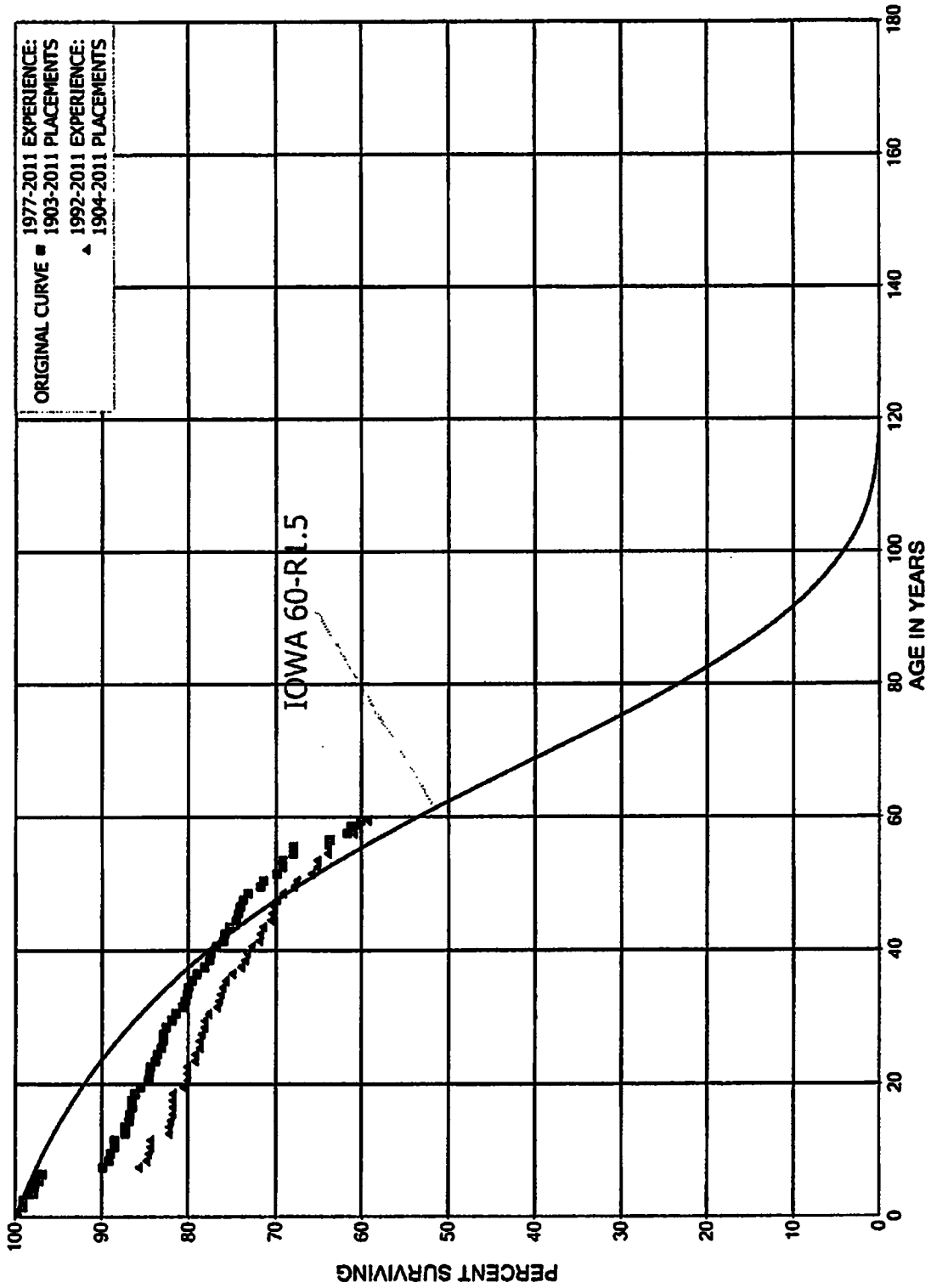
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 374.5 LAND AND LAND RIGHTS - RIGHTS-OF-WAY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1883-2003			EXPERIENCE BAND 1939-2011		
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	41,389		0.0000	1.0000	97.37
120.5	33,039		0.0000	1.0000	97.37
121.5	31,360		0.0000	1.0000	97.37
122.5	24,809		0.0000	1.0000	97.37
123.5	18,229		0.0000	1.0000	97.37
124.5	13,539		0.0000	1.0000	97.37
125.5	4,138		0.0000	1.0000	97.37
126.5	3,186		0.0000	1.0000	97.37
127.5	866		0.0000	1.0000	97.37
128.5					97.37

COLUMBIA GAS OF PENNSYLVANIA, INC.  
 ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING  
 ORIGINAL AND SMOOTH SURVIVOR CURVES



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

ORIGINAL LIFE TABLE

PLACEMENT BAND 1903-2011			EXPERIENCE BAND 1977-2011		
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	2,049,916	5,147	0.0025	0.9975	100.00
0.5	1,862,174	12,285	0.0066	0.9934	99.75
1.5	1,698,997		0.0000	1.0000	99.09
2.5	1,624,938	15,673	0.0096	0.9904	99.09
3.5	1,212,713	3,280	0.0027	0.9973	98.14
4.5	1,078,762	4,126	0.0038	0.9962	97.87
5.5	992,264	1,913	0.0019	0.9981	97.50
6.5	951,966	72,626	0.0763	0.9237	97.31
7.5	860,977	6,752	0.0078	0.9922	89.88
8.5	804,118	1,761	0.0022	0.9978	89.18
9.5	807,238	4,416	0.0055	0.9945	88.98
10.5	803,346		0.0000	1.0000	88.50
11.5	805,791	11,119	0.0138	0.9862	88.50
12.5	855,935		0.0000	1.0000	87.28
13.5	831,400	3,678	0.0044	0.9956	87.28
14.5	856,883	1,109	0.0013	0.9987	86.89
15.5	884,347	2,304	0.0026	0.9974	86.78
16.5	905,023		0.0000	1.0000	86.55
17.5	947,986	3,840	0.0041	0.9959	86.55
18.5	983,401	8,028	0.0082	0.9918	86.20
19.5	1,014,367	10,466	0.0103	0.9897	85.50
20.5	1,001,316	1,680	0.0017	0.9983	84.61
21.5	1,009,331	401	0.0004	0.9996	84.47
22.5	1,023,500	7,860	0.0077	0.9923	84.44
23.5	1,002,713	2,270	0.0023	0.9977	83.79
24.5	1,007,418	5,794	0.0058	0.9942	83.60
25.5	989,114	1,475	0.0015	0.9985	83.12
26.5	979,481	1,119	0.0011	0.9989	83.00
27.5	967,505	3,562	0.0037	0.9963	82.90
28.5	953,436	7,581	0.0080	0.9920	82.60
29.5	900,688	4,497	0.0050	0.9950	81.94
30.5	872,219	8,965	0.0103	0.9897	81.53
31.5	851,512	3,675	0.0043	0.9957	80.69
32.5	816,133	1,395	0.0017	0.9983	80.34
33.5	796,034	1,647	0.0021	0.9979	80.21
34.5	772,313	4,036	0.0052	0.9948	80.04
35.5	742,955	5,600	0.0075	0.9925	79.62
36.5	721,358	8,165	0.0113	0.9887	79.02
37.5	706,194	4,148	0.0059	0.9941	78.13
38.5	686,816	1,774	0.0026	0.9974	77.67

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1903-2011			EXPERIENCE BAND 1977-2011		
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	671,041	5,316	0.0079	0.9921	77.47
40.5	644,658	7,622	0.0118	0.9882	76.85
41.5	631,317	981	0.0016	0.9984	75.95
42.5	613,881	3,971	0.0065	0.9935	75.83
43.5	601,811	6,883	0.0114	0.9886	75.34
44.5	575,911	1,271	0.0022	0.9978	74.48
45.5	551,406	1,771	0.0032	0.9968	74.31
46.5	520,541	2,141	0.0041	0.9959	74.07
47.5	475,600	3,961	0.0083	0.9917	73.77
48.5	438,911	8,264	0.0188	0.9812	73.15
49.5	377,832	1,846	0.0049	0.9951	71.78
50.5	336,733	7,427	0.0221	0.9779	71.43
51.5	308,919	2,763	0.0089	0.9911	69.85
52.5	278,755	171	0.0006	0.9994	69.23
53.5	234,648	4,029	0.0172	0.9828	69.18
54.5	200,239	197	0.0010	0.9990	68.00
55.5	166,416	9,966	0.0599	0.9401	67.93
56.5	144,346	4,849	0.0336	0.9664	63.86
57.5	118,232	857	0.0072	0.9928	61.72
58.5	92,802	1,648	0.0178	0.9822	61.27
59.5	71,847		0.0000	1.0000	60.18
60.5	59,556	1,578	0.0265	0.9735	60.18
61.5	52,936	202	0.0038	0.9962	58.59
62.5	52,013	265	0.0051	0.9949	58.36
63.5	45,464		0.0000	1.0000	58.06
64.5	42,735		0.0000	1.0000	58.06
65.5	41,711	120	0.0029	0.9971	58.06
66.5	40,951	69	0.0017	0.9983	57.90
67.5	40,882	1,262	0.0309	0.9691	57.80
68.5	38,975	5,725	0.1469	0.8531	56.02
69.5	31,964	77	0.0024	0.9976	47.79
70.5	30,989	419	0.0135	0.9865	47.67
71.5	30,167	266	0.0088	0.9912	47.03
72.5	25,182	281	0.0112	0.9888	46.61
73.5	25,341	277	0.0109	0.9891	46.09
74.5	24,005	58	0.0024	0.9976	45.59
75.5	21,948		0.0000	1.0000	45.48
76.5	21,851		0.0000	1.0000	45.48
77.5	20,749		0.0000	1.0000	45.48
78.5	17,741	699	0.0394	0.9606	45.48

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1903-2011			EXPERIENCE BAND 1977-2011			
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	14,533	501	0.0345	0.9655	43.69	
80.5	12,708		0.0000	1.0000	42.18	
81.5	8,047	250	0.0311	0.9689	42.18	
82.5	3,194		0.0000	1.0000	40.87	
83.5	2,631		0.0000	1.0000	40.87	
84.5	2,405		0.0000	1.0000	40.87	
85.5	2,405		0.0000	1.0000	40.87	
86.5	2,193		0.0000	1.0000	40.87	
87.5	1,477		0.0000	1.0000	40.87	
88.5	1,477		0.0000	1.0000	40.87	
89.5	1,127		0.0000	1.0000	40.87	
90.5	1,127		0.0000	1.0000	40.87	
91.5	1,127	105	0.0928	0.9072	40.87	
92.5	1,022		0.0000	1.0000	37.08	
93.5	1,022		0.0000	1.0000	37.08	
94.5	1,022		0.0000	1.0000	37.08	
95.5	978		0.0000	1.0000	37.08	
96.5	978		0.0000	1.0000	37.08	
97.5	542		0.0000	1.0000	37.08	
98.5	111		0.0000	1.0000	37.08	
99.5	111		0.0000	1.0000	37.08	
100.5	111		0.0000	1.0000	37.08	
101.5	111		0.0000	1.0000	37.08	
102.5	111	23	0.2042	0.7958	37.08	
103.5	88		0.0000	1.0000	29.51	
104.5	88		0.0000	1.0000	29.51	
105.5	88		0.0000	1.0000	29.51	
106.5					29.51	



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

ORIGINAL LIFE TABLE

PLACEMENT BAND 1904-2011			EXPERIENCE BAND 1992-2011		
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	1,671,088	5,147	0.0031	0.9969	100.00
0.5	1,491,380	12,285	0.0082	0.9918	99.69
1.5	1,318,505		0.0000	1.0000	98.87
2.5	1,239,966	15,673	0.0126	0.9874	98.87
3.5	848,397	1,127	0.0013	0.9987	97.62
4.5	709,882	4,126	0.0058	0.9942	97.49
5.5	624,010	1,913	0.0031	0.9969	96.92
6.5	586,288	66,938	0.1142	0.8858	96.63
7.5	504,721	5,143	0.0102	0.9898	85.60
8.5	451,733	919	0.0020	0.9980	84.72
9.5	473,504	1,642	0.0035	0.9965	84.55
10.5	468,873		0.0000	1.0000	84.26
11.5	450,792	11,119	0.0247	0.9753	84.26
12.5	468,199		0.0000	1.0000	82.18
13.5	425,226	1,425	0.0034	0.9966	82.18
14.5	423,360	1,109	0.0026	0.9974	81.90
15.5	432,882		0.0000	1.0000	81.69
16.5	439,053		0.0000	1.0000	81.69
17.5	452,813		0.0000	1.0000	81.69
18.5	445,950	6,761	0.0152	0.9848	81.69
19.5	459,728	2,140	0.0047	0.9953	80.45
20.5	450,689		0.0000	1.0000	80.08
21.5	448,247		0.0000	1.0000	80.08
22.5	455,058	4,913	0.0108	0.9892	80.08
23.5	424,904		0.0000	1.0000	79.21
24.5	438,782	3,258	0.0074	0.9926	79.21
25.5	439,140		0.0000	1.0000	78.62
26.5	460,002	1,119	0.0024	0.9976	78.62
27.5	507,614	2,456	0.0048	0.9952	78.43
28.5	523,310		0.0000	1.0000	78.05
29.5	531,918	2,949	0.0055	0.9945	78.05
30.5	545,481	6,723	0.0123	0.9877	77.62
31.5	562,576	2,370	0.0042	0.9958	76.66
32.5	559,789	894	0.0016	0.9984	76.34
33.5	594,100	1,647	0.0028	0.9972	76.22
34.5	608,009	3,533	0.0058	0.9942	76.01
35.5	612,528	5,600	0.0091	0.9909	75.57
36.5	604,289	8,165	0.0135	0.9865	74.87
37.5	611,442	4,148	0.0068	0.9932	73.86
38.5	617,778	1,774	0.0029	0.9971	73.36

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1904-2011			EXPERIENCE BAND 1992-2011			
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	625,244	4,212	0.0067	0.9933	73.15	
40.5	610,787	7,622	0.0125	0.9875	72.66	
41.5	603,241	795	0.0013	0.9987	71.75	
42.5	586,872	3,432	0.0058	0.9942	71.66	
43.5	578,160	6,883	0.0119	0.9881	71.24	
44.5	551,659	1,071	0.0019	0.9981	70.39	
45.5	525,180	1,771	0.0034	0.9966	70.25	
46.5	490,395	2,010	0.0041	0.9959	70.02	
47.5	434,371	3,947	0.0091	0.9909	69.73	
48.5	399,390	8,162	0.0204	0.9796	69.10	
49.5	338,801	1,568	0.0046	0.9954	67.68	
50.5	298,267	7,427	0.0249	0.9751	67.37	
51.5	261,881	2,509	0.0096	0.9904	65.69	
52.5	235,933		0.0000	1.0000	65.06	
53.5	193,194	3,507	0.0182	0.9818	65.06	
54.5	158,880		0.0000	1.0000	63.88	
55.5	127,227	664	0.0052	0.9948	63.88	
56.5	114,631	4,849	0.0423	0.9577	63.55	
57.5	89,727	811	0.0090	0.9910	60.86	
58.5	67,755	1,226	0.0181	0.9819	60.31	
59.5	50,243		0.0000	1.0000	59.22	
60.5	40,493	1,578	0.0390	0.9610	59.22	
61.5	38,991	202	0.0052	0.9948	56.91	
62.5	48,459	162	0.0033	0.9967	56.62	
63.5	42,146		0.0000	1.0000	56.43	
64.5	39,851		0.0000	1.0000	56.43	
65.5	39,118	83	0.0021	0.9979	56.43	
66.5	38,607	69	0.0018	0.9982	56.31	
67.5	39,255	1,262	0.0322	0.9678	56.21	
68.5	37,243	5,725	0.1537	0.8463	54.40	
69.5	30,582	77	0.0025	0.9975	46.04	
70.5	29,607	94	0.0032	0.9968	45.92	
71.5	28,959	266	0.0092	0.9908	45.77	
72.5	24,014	281	0.0117	0.9883	45.36	
73.5	23,114	236	0.0102	0.9898	44.82	
74.5	22,879	58	0.0025	0.9975	44.37	
75.5	20,866		0.0000	1.0000	44.25	
76.5	20,769		0.0000	1.0000	44.25	
77.5	20,103		0.0000	1.0000	44.25	
78.5	17,525	699	0.0399	0.9601	44.25	

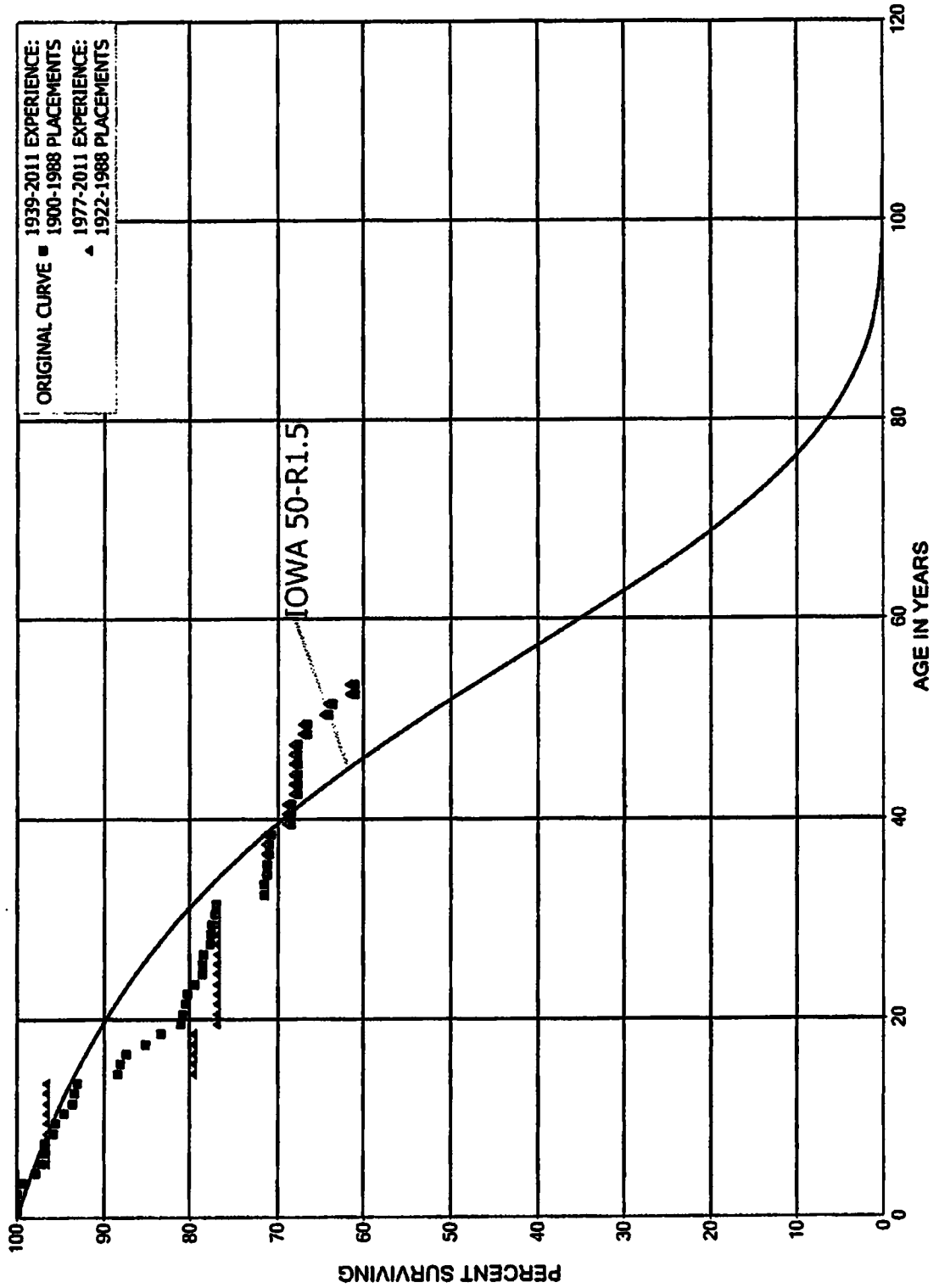
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1904-2011			EXPERIENCE BAND 1992-2011			
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	14,318	501	0.0350	0.9650	42.49	
80.5	12,493		0.0000	1.0000	41.00	
81.5	7,831	250	0.0319	0.9681	41.00	
82.5	2,979		0.0000	1.0000	39.69	
83.5	2,520		0.0000	1.0000	39.69	
84.5	2,295		0.0000	1.0000	39.69	
85.5	2,295		0.0000	1.0000	39.69	
86.5	2,171		0.0000	1.0000	39.69	
87.5	1,477		0.0000	1.0000	39.69	
88.5	1,477		0.0000	1.0000	39.69	
89.5	1,127		0.0000	1.0000	39.69	
90.5	1,127		0.0000	1.0000	39.69	
91.5	1,127	105	0.0928	0.9072	39.69	
92.5	1,022		0.0000	1.0000	36.01	
93.5	1,022		0.0000	1.0000	36.01	
94.5	1,022		0.0000	1.0000	36.01	
95.5	978		0.0000	1.0000	36.01	
96.5	978		0.0000	1.0000	36.01	
97.5	542		0.0000	1.0000	36.01	
98.5	111		0.0000	1.0000	36.01	
99.5	111		0.0000	1.0000	36.01	
100.5	111		0.0000	1.0000	36.01	
101.5	111		0.0000	1.0000	36.01	
102.5	111	23	0.2042	0.7958	36.01	
103.5	88		0.0000	1.0000	28.66	
104.5	88		0.0000	1.0000	28.66	
105.5	88		0.0000	1.0000	28.66	
106.5					28.66	

COLUMBIA GAS OF PENNSYLVANIA, INC.  
 ACCOUNT 375.6 STRUCTURES AND IMPROVEMENTS - INDUSTRIAL MEASURING AND REGULATING  
 ORIGINAL AND SMOOTH SURVIVOR CURVES



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.6 STRUCTURES AND IMPROVEMENTS - INDUSTRIAL MEASURING AND  
REGULATING

ORIGINAL LIFE TABLE

PLACEMENT BAND 1900-1988			EXPERIENCE BAND 1939-2011		
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	127,534		0.0000	1.0000	100.00
0.5	129,897	87	0.0007	0.9993	100.00
1.5	130,624		0.0000	1.0000	99.93
2.5	136,972	851	0.0062	0.9938	99.93
3.5	138,417	2,007	0.0145	0.9855	99.31
4.5	141,989	1,079	0.0076	0.9924	97.87
5.5	139,653	436	0.0031	0.9969	97.13
6.5	139,644	42	0.0003	0.9997	96.82
7.5	142,492	1,338	0.0094	0.9906	96.80
8.5	150,705	407	0.0027	0.9973	95.89
9.5	151,836	1,534	0.0101	0.9899	95.63
10.5	149,563	1,663	0.0111	0.9889	94.66
11.5	148,193	279	0.0019	0.9981	93.61
12.5	148,092	559	0.0038	0.9962	93.43
13.5	147,067	7,390	0.0502	0.9498	93.08
14.5	139,238	450	0.0032	0.9968	88.40
15.5	137,031	1,181	0.0086	0.9914	88.12
16.5	134,304	3,383	0.0252	0.9748	87.36
17.5	123,702	2,504	0.0202	0.9798	85.16
18.5	117,695	3,353	0.0285	0.9715	83.43
19.5	112,523	312	0.0028	0.9972	81.06
20.5	112,513	483	0.0043	0.9957	80.83
21.5	113,435	216	0.0019	0.9981	80.48
22.5	112,903	1,191	0.0105	0.9895	80.33
23.5	100,003	1,159	0.0116	0.9884	79.48
24.5	99,083		0.0000	1.0000	78.56
25.5	98,715	127	0.0013	0.9987	78.56
26.5	98,652	895	0.0091	0.9909	78.46
27.5	97,324	114	0.0012	0.9988	77.75
28.5	97,376	127	0.0013	0.9987	77.66
29.5	96,347	521	0.0054	0.9946	77.56
30.5	95,701	125	0.0013	0.9987	77.14
31.5	91,860	6,639	0.0723	0.9277	77.04
32.5	85,916		0.0000	1.0000	71.47
33.5	85,940	300	0.0035	0.9965	71.47
34.5	85,552		0.0000	1.0000	71.22
35.5	85,682	395	0.0046	0.9954	71.22
36.5	84,471		0.0000	1.0000	70.89
37.5	84,437	136	0.0016	0.9984	70.89
38.5	84,316	2,831	0.0336	0.9664	70.78

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.6 STRUCTURES AND IMPROVEMENTS - INDUSTRIAL MEASURING AND REGULATING

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1900-1988			EXPERIENCE BAND 1939-2011		
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	80,815		0.0000	1.0000	68.40
40.5	73,094		0.0000	1.0000	68.40
41.5	70,643	814	0.0115	0.9885	68.40
42.5	69,830		0.0000	1.0000	67.61
43.5	69,830		0.0000	1.0000	67.61
44.5	68,215		0.0000	1.0000	67.61
45.5	68,215		0.0000	1.0000	67.61
46.5	68,215	25	0.0004	0.9996	67.61
47.5	66,748	1,034	0.0155	0.9845	67.59
48.5	62,298		0.0000	1.0000	66.54
49.5	62,298	2,347	0.0377	0.9623	66.54
50.5	57,996	386	0.0067	0.9933	64.04
51.5	56,241	2,235	0.0397	0.9603	63.61
52.5	48,103		0.0000	1.0000	61.08
53.5	46,435		0.0000	1.0000	61.08
54.5	32,060		0.0000	1.0000	61.08
55.5	29,537		0.0000	1.0000	61.08
56.5	24,633		0.0000	1.0000	61.08
57.5	24,633		0.0000	1.0000	61.08
58.5	20,373		0.0000	1.0000	61.08
59.5	16,404		0.0000	1.0000	61.08
60.5	13,272		0.0000	1.0000	61.08
61.5	11,414		0.0000	1.0000	61.08
62.5	11,414		0.0000	1.0000	61.08
63.5	10,932		0.0000	1.0000	61.08
64.5	10,363		0.0000	1.0000	61.08
65.5	9,986	1,985	0.1988	0.8012	61.08
66.5	8,000		0.0000	1.0000	48.94
67.5	5,150		0.0000	1.0000	48.94
68.5	5,150		0.0000	1.0000	48.94
69.5	4,132		0.0000	1.0000	48.94
70.5	4,132		0.0000	1.0000	48.94
71.5	3,692	43	0.0116	0.9884	48.94
72.5	3,649		0.0000	1.0000	48.37
73.5	2,186		0.0000	1.0000	48.37
74.5	1,567		0.0000	1.0000	48.37
75.5	1,546		0.0000	1.0000	48.37
76.5	1,399		0.0000	1.0000	48.37
77.5	615		0.0000	1.0000	48.37
78.5	615		0.0000	1.0000	48.37

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.6 STRUCTURES AND IMPROVEMENTS - INDUSTRIAL MEASURING AND  
 REGULATING

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1900-1988			EXPERIENCE BAND 1939-2011		
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	615		0.0000	1.0000	48.37
80.5	351		0.0000	1.0000	48.37
81.5	224		0.0000	1.0000	48.37
82.5	201		0.0000	1.0000	48.37
83.5	114		0.0000	1.0000	48.37
84.5	114		0.0000	1.0000	48.37
85.5	114		0.0000	1.0000	48.37
86.5	114		0.0000	1.0000	48.37
87.5	114		0.0000	1.0000	48.37
88.5	114		0.0000	1.0000	48.37
89.5					48.37

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.6 STRUCTURES AND IMPROVEMENTS - INDUSTRIAL MEASURING AND REGULATING

ORIGINAL LIFE TABLE

PLACEMENT BAND 1922-1988		EXPERIENCE BAND 1977-2011			
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	23,148		0.0000	1.0000	100.00
0.5	23,148		0.0000	1.0000	100.00
1.5	23,148		0.0000	1.0000	100.00
2.5	23,148		0.0000	1.0000	100.00
3.5	24,973		0.0000	1.0000	100.00
4.5	25,165	877	0.0348	0.9652	100.00
5.5	32,010		0.0000	1.0000	96.52
6.5	34,460		0.0000	1.0000	96.52
7.5	34,460		0.0000	1.0000	96.52
8.5	35,970		0.0000	1.0000	96.52
9.5	37,585		0.0000	1.0000	96.52
10.5	36,636		0.0000	1.0000	96.52
11.5	36,446		0.0000	1.0000	96.52
12.5	37,888		0.0000	1.0000	96.52
13.5	41,859	7,365	0.1759	0.8241	96.52
14.5	34,494		0.0000	1.0000	79.53
15.5	36,745		0.0000	1.0000	79.53
16.5	38,090		0.0000	1.0000	79.53
17.5	47,031		0.0000	1.0000	79.53
18.5	48,699	1,686	0.0346	0.9654	79.53
19.5	63,624		0.0000	1.0000	76.78
20.5	67,385		0.0000	1.0000	76.78
21.5	73,370		0.0000	1.0000	76.78
22.5	73,370		0.0000	1.0000	76.78
23.5	65,732		0.0000	1.0000	76.78
24.5	70,427		0.0000	1.0000	76.78
25.5	78,070		0.0000	1.0000	76.78
26.5	79,928		0.0000	1.0000	76.78
27.5	79,928		0.0000	1.0000	76.78
28.5	80,411		0.0000	1.0000	76.78
29.5	80,979		0.0000	1.0000	76.78
30.5	81,356		0.0000	1.0000	76.78
31.5	77,471	5,591	0.0722	0.9278	76.78
32.5	76,462		0.0000	1.0000	71.24
33.5	76,462		0.0000	1.0000	71.24
34.5	79,244		0.0000	1.0000	71.24
35.5	79,244		0.0000	1.0000	71.24
36.5	78,843		0.0000	1.0000	71.24
37.5	78,843		0.0000	1.0000	71.24
38.5	80,348	2,533	0.0315	0.9685	71.24



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.6 STRUCTURES AND IMPROVEMENTS - INDUSTRIAL MEASURING AND  
REGULATING

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1922-1988			EXPERIENCE BAND 1977-2011		
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	77,764		0.0000	1.0000	68.99
40.5	70,064		0.0000	1.0000	68.99
41.5	67,761	814	0.0120	0.9880	68.99
42.5	67,731		0.0000	1.0000	68.17
43.5	68,754		0.0000	1.0000	68.17
44.5	67,139		0.0000	1.0000	68.17
45.5	67,403		0.0000	1.0000	68.17
46.5	67,561		0.0000	1.0000	68.17
47.5	66,141	1,022	0.0155	0.9845	68.17
48.5	62,144		0.0000	1.0000	67.11
49.5	62,144	2,347	0.0378	0.9622	67.11
50.5	57,842	386	0.0067	0.9933	64.58
51.5	56,112	2,235	0.0398	0.9602	64.15
52.5	47,974		0.0000	1.0000	61.59
53.5	46,306		0.0000	1.0000	61.59
54.5	32,045		0.0000	1.0000	61.59
55.5	29,537		0.0000	1.0000	61.59
56.5	24,633		0.0000	1.0000	61.59
57.5	24,633		0.0000	1.0000	61.59
58.5	20,373		0.0000	1.0000	61.59
59.5	16,404		0.0000	1.0000	61.59
60.5	13,272		0.0000	1.0000	61.59
61.5	11,414		0.0000	1.0000	61.59
62.5	11,414		0.0000	1.0000	61.59
63.5	10,932		0.0000	1.0000	61.59
64.5	10,363		0.0000	1.0000	61.59
65.5	9,986	1,985	0.1988	0.8012	61.59
66.5	8,000		0.0000	1.0000	49.35
67.5	5,150		0.0000	1.0000	49.35
68.5	5,150		0.0000	1.0000	49.35
69.5	4,132		0.0000	1.0000	49.35
70.5	4,132		0.0000	1.0000	49.35
71.5	3,692	43	0.0116	0.9884	49.35
72.5	3,649		0.0000	1.0000	48.78
73.5	2,186		0.0000	1.0000	48.78
74.5	1,567		0.0000	1.0000	48.78
75.5	1,546		0.0000	1.0000	48.78
76.5	1,399		0.0000	1.0000	48.78
77.5	615		0.0000	1.0000	48.78
78.5	615		0.0000	1.0000	48.78

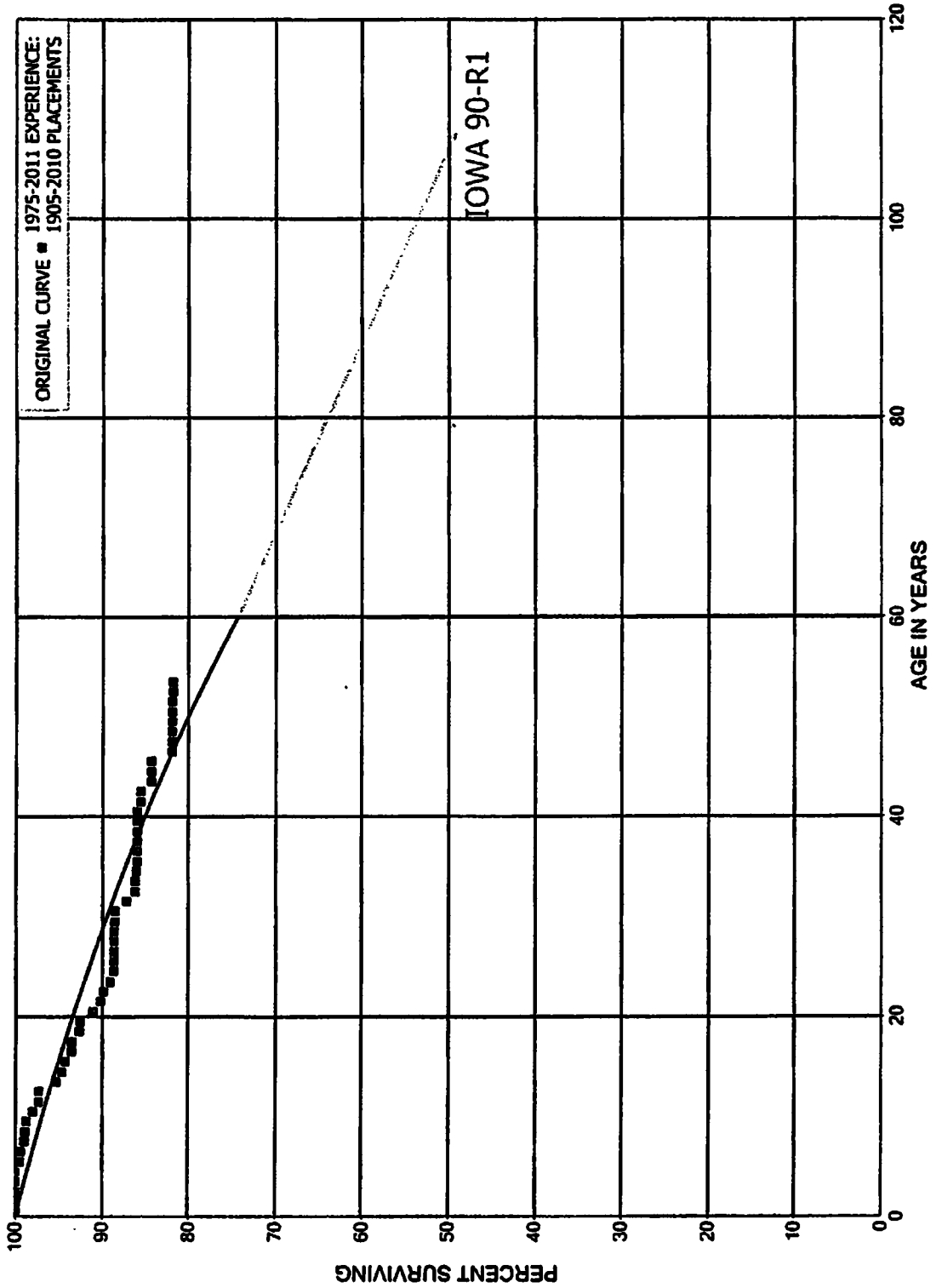
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.6 STRUCTURES AND IMPROVEMENTS - INDUSTRIAL MEASURING AND  
REGULATING

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1922-1988			EXPERIENCE BAND 1977-2011		
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	615		0.0000	1.0000	48.78
80.5	351		0.0000	1.0000	48.78
81.5	224		0.0000	1.0000	48.78
82.5	201		0.0000	1.0000	48.78
83.5	114		0.0000	1.0000	48.78
84.5	114		0.0000	1.0000	48.78
85.5	114		0.0000	1.0000	48.78
86.5	114		0.0000	1.0000	48.78
87.5	114		0.0000	1.0000	48.78
88.5	114		0.0000	1.0000	48.78
89.5					48.78

COLUMBIA GAS OF PENNSYLVANIA, INC.  
ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - LIFE SPAN GROUP  
ORIGINAL AND SMOOTH SURVIVOR CURVES



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - LIFE SPAN GROUP

ORIGINAL LIFE TABLE

PLACEMENT BAND 1905-2010			EXPERIENCE BAND 1975-2011		
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	3,959,912		0.0000	1.0000	100.00
0.5	3,974,915		0.0000	1.0000	100.00
1.5	3,925,150		0.0000	1.0000	100.00
2.5	3,951,130		0.0000	1.0000	100.00
3.5	4,164,434		0.0000	1.0000	100.00
4.5	4,295,836	23,416	0.0055	0.9945	100.00
5.5	4,115,483	3,948	0.0010	0.9990	99.45
6.5	3,936,077	16,625	0.0042	0.9958	99.36
7.5	3,721,248	3,734	0.0010	0.9990	98.94
8.5	3,665,837	3,360	0.0009	0.9991	98.84
9.5	3,477,818	26,185	0.0075	0.9925	98.75
10.5	3,537,664	24,089	0.0068	0.9932	98.01
11.5	3,407,244	955	0.0003	0.9997	97.34
12.5	3,391,275	70,855	0.0209	0.9791	97.31
13.5	2,963,136	20,717	0.0070	0.9930	95.28
14.5	3,030,413	12,081	0.0040	0.9960	94.61
15.5	3,083,461	24,393	0.0079	0.9921	94.24
16.5	2,935,253		0.0000	1.0000	93.49
17.5	3,167,003	28,648	0.0090	0.9910	93.49
18.5	3,076,516	5,968	0.0019	0.9981	92.64
19.5	3,102,897	47,147	0.0152	0.9848	92.46
20.5	2,986,732	30,603	0.0102	0.9898	91.06
21.5	3,271,518	9,932	0.0030	0.9970	90.13
22.5	3,246,129	28,919	0.0089	0.9911	89.85
23.5	3,208,828	16,083	0.0050	0.9950	89.05
24.5	2,954,842		0.0000	1.0000	88.61
25.5	2,938,598		0.0000	1.0000	88.61
26.5	2,915,733		0.0000	1.0000	88.61
27.5	2,806,514	173	0.0001	0.9999	88.61
28.5	2,790,723	2,630	0.0009	0.9991	88.60
29.5	2,711,636		0.0000	1.0000	88.52
30.5	2,091,146	31,303	0.0150	0.9850	88.52
31.5	1,973,171	23,954	0.0121	0.9879	87.19
32.5	1,796,256		0.0000	1.0000	86.13
33.5	1,727,978	720	0.0004	0.9996	86.13
34.5	1,708,001	2,775	0.0016	0.9984	86.10
35.5	1,679,257		0.0000	1.0000	85.96
36.5	1,671,390		0.0000	1.0000	85.96
37.5	1,519,825	799	0.0005	0.9995	85.96
38.5	1,503,489		0.0000	1.0000	85.91

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - LIFE SPAN GROUP

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1905-2010		EXPERIENCE BAND 1975-2011			
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	1,148,546		0.0000	1.0000	85.91
40.5	1,038,969	4,275	0.0041	0.9959	85.91
41.5	878,590		0.0000	1.0000	85.56
42.5	844,392	12,186	0.0144	0.9856	85.56
43.5	818,941		0.0000	1.0000	84.32
44.5	837,888		0.0000	1.0000	84.32
45.5	816,392	22,581	0.0277	0.9723	84.32
46.5	767,582		0.0000	1.0000	81.99
47.5	683,388		0.0000	1.0000	81.99
48.5	662,936	683	0.0010	0.9990	81.99
49.5	657,990		0.0000	1.0000	81.91
50.5	664,999		0.0000	1.0000	81.91
51.5	658,890	959	0.0015	0.9985	81.91
52.5	558,162		0.0000	1.0000	81.79
53.5	482,200	112	0.0002	0.9998	81.79
54.5	61,655		0.0000	1.0000	81.77
55.5	61,031		0.0000	1.0000	81.77
56.5	52,105		0.0000	1.0000	81.77
57.5	55,870		0.0000	1.0000	81.77
58.5	54,752		0.0000	1.0000	81.77
59.5	45,905		0.0000	1.0000	81.77
60.5	45,905		0.0000	1.0000	81.77
61.5	61,812		0.0000	1.0000	81.77
62.5	61,474		0.0000	1.0000	81.77
63.5	62,707		0.0000	1.0000	81.77
64.5	62,707		0.0000	1.0000	81.77
65.5	62,707		0.0000	1.0000	81.77
66.5	63,048		0.0000	1.0000	81.77
67.5	55,797		0.0000	1.0000	81.77
68.5	51,886		0.0000	1.0000	81.77
69.5	84,305		0.0000	1.0000	81.77
70.5	85,720	2	0.0000	1.0000	81.77
71.5	85,719		0.0000	1.0000	81.77
72.5	85,208		0.0000	1.0000	81.77
73.5	85,208		0.0000	1.0000	81.77
74.5	50,990		0.0000	1.0000	81.77
75.5	50,607		0.0000	1.0000	81.77
76.5	49,526		0.0000	1.0000	81.77
77.5	49,011		0.0000	1.0000	81.77
78.5	48,609		0.0000	1.0000	81.77

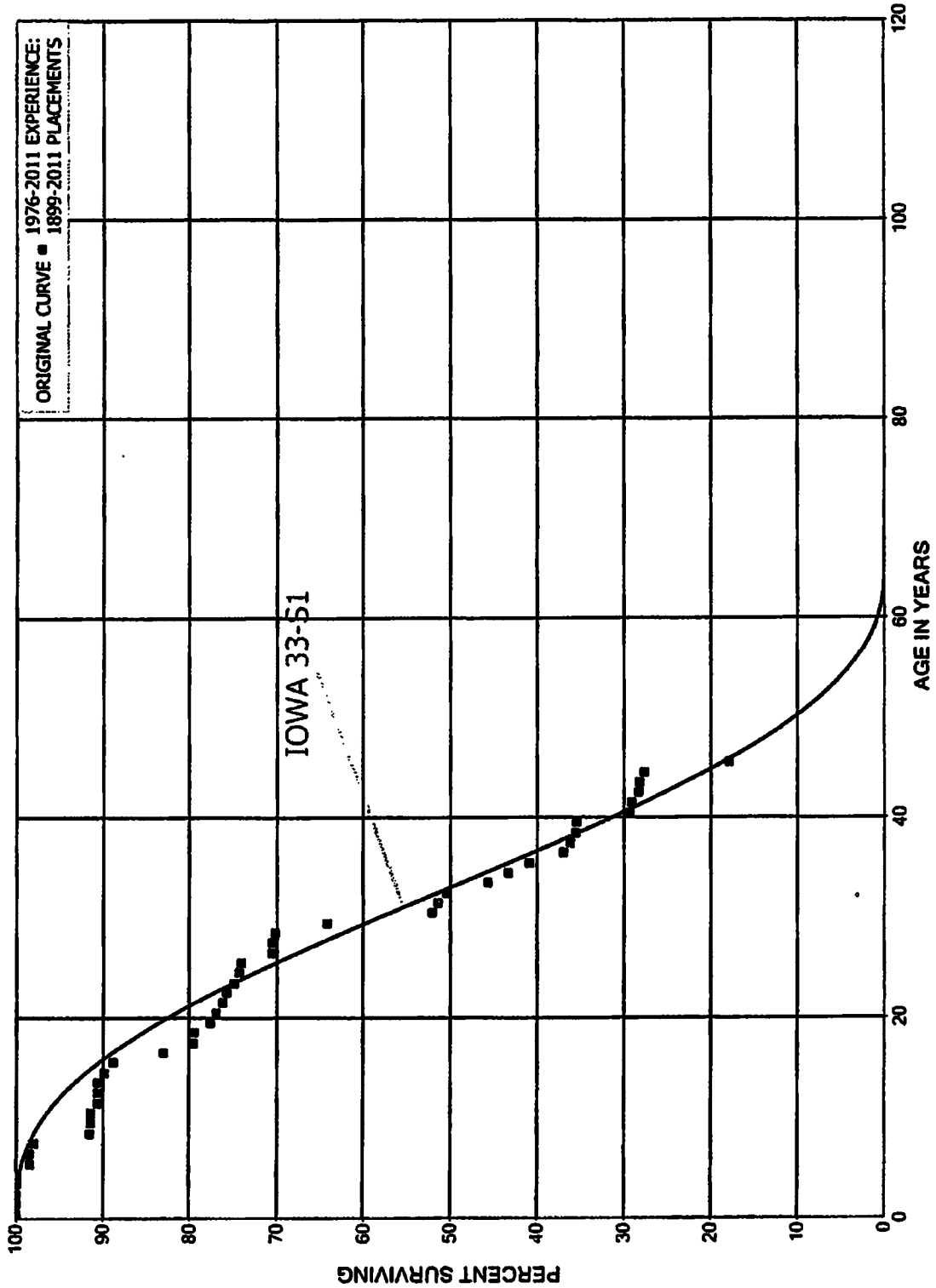
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - LIFE SPAN GROUP

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1905-2010			EXPERIENCE BAND 1975-2011		
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	73,710		0.0000	1.0000	81.77
80.5	73,710		0.0000	1.0000	81.77
81.5	73,281		0.0000	1.0000	81.77
82.5	73,281		0.0000	1.0000	81.77
83.5	72,742		0.0000	1.0000	81.77
84.5	72,742		0.0000	1.0000	81.77
85.5	38,985		0.0000	1.0000	81.77
86.5	38,690		0.0000	1.0000	81.77
87.5	38,690		0.0000	1.0000	81.77
88.5	38,690		0.0000	1.0000	81.77
89.5	38,690		0.0000	1.0000	81.77
90.5	38,690		0.0000	1.0000	81.77
91.5	38,690		0.0000	1.0000	81.77
92.5	38,690		0.0000	1.0000	81.77
93.5	38,690		0.0000	1.0000	81.77
94.5					81.77

COLUMBIA GAS OF PENNSYLVANIA, INC.  
ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - CONTINUOUS GROUP  
ORIGINAL AND SMOOTH SURVIVOR CURVES



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - CONTINUOUS GROUP

ORIGINAL LIFE TABLE

PLACEMENT BAND 1899-2011

EXPERIENCE BAND 1976-2011

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	2,688,722		0.0000	1.0000	100.00
0.5	2,661,197	2,800	0.0011	0.9989	100.00
1.5	2,604,073		0.0000	1.0000	99.89
2.5	1,873,227	1,015	0.0005	0.9995	99.89
3.5	1,368,851		0.0000	1.0000	99.84
4.5	1,234,100	18,024	0.0146	0.9854	99.84
5.5	375,889		0.0000	1.0000	98.38
6.5	320,630	1,283	0.0040	0.9960	98.38
7.5	310,713	20,678	0.0665	0.9335	97.99
8.5	313,806	199	0.0006	0.9994	91.47
9.5	329,575		0.0000	1.0000	91.41
10.5	336,896	2,879	0.0085	0.9915	91.41
11.5	291,174		0.0000	1.0000	90.63
12.5	273,635	138	0.0005	0.9995	90.63
13.5	208,674	1,757	0.0084	0.9916	90.58
14.5	230,589	2,529	0.0110	0.9890	89.82
15.5	238,197	15,360	0.0645	0.9355	88.83
16.5	216,715	8,990	0.0415	0.9585	83.11
17.5	224,483	384	0.0017	0.9983	79.66
18.5	226,844	5,462	0.0241	0.9759	79.52
19.5	229,168	2,117	0.0092	0.9908	77.61
20.5	266,564	2,417	0.0091	0.9909	76.89
21.5	217,360	1,334	0.0061	0.9939	76.19
22.5	211,447	2,536	0.0120	0.9880	75.73
23.5	195,195	1,343	0.0069	0.9931	74.82
24.5	200,602	725	0.0036	0.9964	74.30
25.5	191,404	9,144	0.0478	0.9522	74.03
26.5	168,522		0.0000	1.0000	70.50
27.5	174,406	871	0.0050	0.9950	70.50
28.5	170,656	14,605	0.0856	0.9144	70.15
29.5	151,076	28,346	0.1876	0.8124	64.14
30.5	123,532	1,742	0.0141	0.9859	52.11
31.5	113,264	2,147	0.0190	0.9810	51.37
32.5	106,120	10,113	0.0953	0.9047	50.40
33.5	89,457	4,442	0.0497	0.9503	45.60
34.5	82,295	4,759	0.0578	0.9422	43.33
35.5	72,344	6,813	0.0942	0.9058	40.83
36.5	78,187	1,590	0.0203	0.9797	36.98
37.5	76,793	1,652	0.0215	0.9785	36.23
38.5	73,957	37	0.0005	0.9995	35.45



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - CONTINUOUS GROUP

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1899-2011			EXPERIENCE BAND 1976-2011		
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	64,220	11,088	0.1727	0.8273	35.43
40.5	56,743	521	0.0092	0.9908	29.31
41.5	55,891	1,453	0.0260	0.9740	29.05
42.5	52,776	188	0.0036	0.9964	28.29
43.5	52,355	975	0.0186	0.9814	28.19
44.5	74,461	26,538	0.3564	0.6436	27.66
45.5	46,324	260	0.0056	0.9944	17.81
46.5	59,896	797	0.0133	0.9867	17.71
47.5	58,040		0.0000	1.0000	17.47
48.5	58,167		0.0000	1.0000	17.47
49.5	59,287	176	0.0030	0.9970	17.47
50.5	53,241	218	0.0041	0.9959	17.42
51.5	61,243		0.0000	1.0000	17.35
52.5	60,124	1,146	0.0191	0.9809	17.35
53.5	62,871	480	0.0076	0.9924	17.02
54.5	61,530	4,037	0.0656	0.9344	16.89
55.5	57,199		0.0000	1.0000	15.78
56.5	50,216		0.0000	1.0000	15.78
57.5	42,915	354	0.0082	0.9918	15.78
58.5	40,091		0.0000	1.0000	15.65
59.5	40,091		0.0000	1.0000	15.65
60.5	39,997		0.0000	1.0000	15.65
61.5	32,689		0.0000	1.0000	15.65
62.5	57,791	7,561	0.1308	0.8692	15.65
63.5	43,715		0.0000	1.0000	13.60
64.5	43,715		0.0000	1.0000	13.60
65.5	43,715	1,403	0.0321	0.9679	13.60
66.5	41,971		0.0000	1.0000	13.16
67.5	41,971		0.0000	1.0000	13.16
68.5	33,357		0.0000	1.0000	13.16
69.5	33,357	343	0.0103	0.9897	13.16
70.5	31,599		0.0000	1.0000	13.03
71.5	31,599		0.0000	1.0000	13.03
72.5	30,398		0.0000	1.0000	13.03
73.5	30,398		0.0000	1.0000	13.03
74.5	30,398		0.0000	1.0000	13.03
75.5	30,267	111	0.0037	0.9963	13.03
76.5	30,715	560	0.0182	0.9818	12.98
77.5	29,377		0.0000	1.0000	12.74
78.5	29,377		0.0000	1.0000	12.74

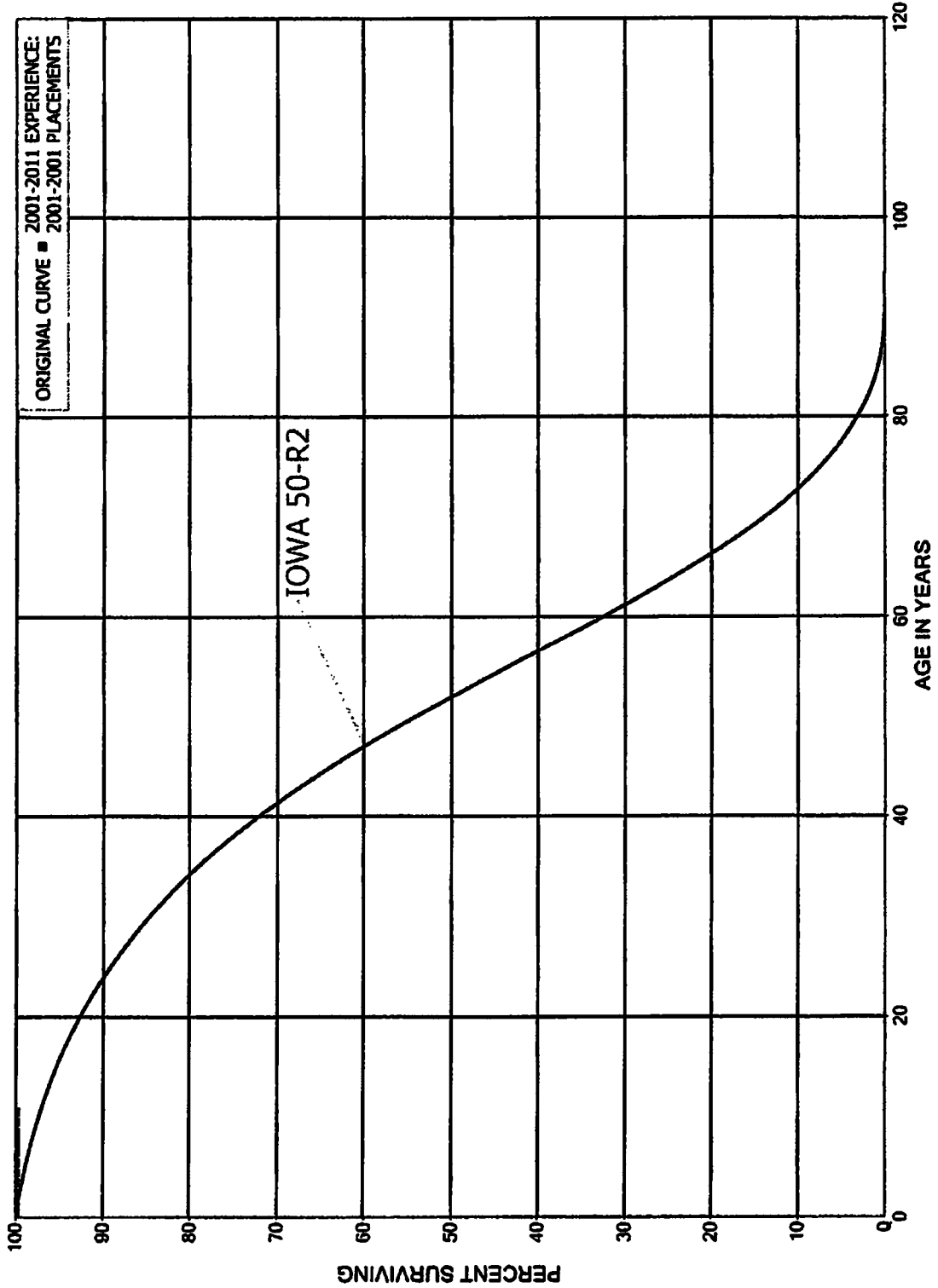
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - CONTINUOUS GROUP

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1899-2011			EXPERIENCE BAND 1976-2011		
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	4,275		0.0000	1.0000	12.74
80.5	270		0.0000	1.0000	12.74
81.5	270		0.0000	1.0000	12.74
82.5	270	127	0.4708	0.5292	12.74
83.5	143		0.0000	1.0000	6.74
84.5	143		0.0000	1.0000	6.74
85.5	143		0.0000	1.0000	6.74
86.5	143		0.0000	1.0000	6.74
87.5	143		0.0000	1.0000	6.74
88.5	143		0.0000	1.0000	6.74
89.5	143		0.0000	1.0000	6.74
90.5	143		0.0000	1.0000	6.74
91.5	143		0.0000	1.0000	6.74
92.5					6.74

COLUMBIA GAS OF PENNSYLVANIA, INC.  
ACCOUNT 375.8 STRUCTURES AND IMPROVEMENTS - COMMUNICATION STRUCTURES  
ORIGINAL AND SMOOTH SURVIVOR CURVES



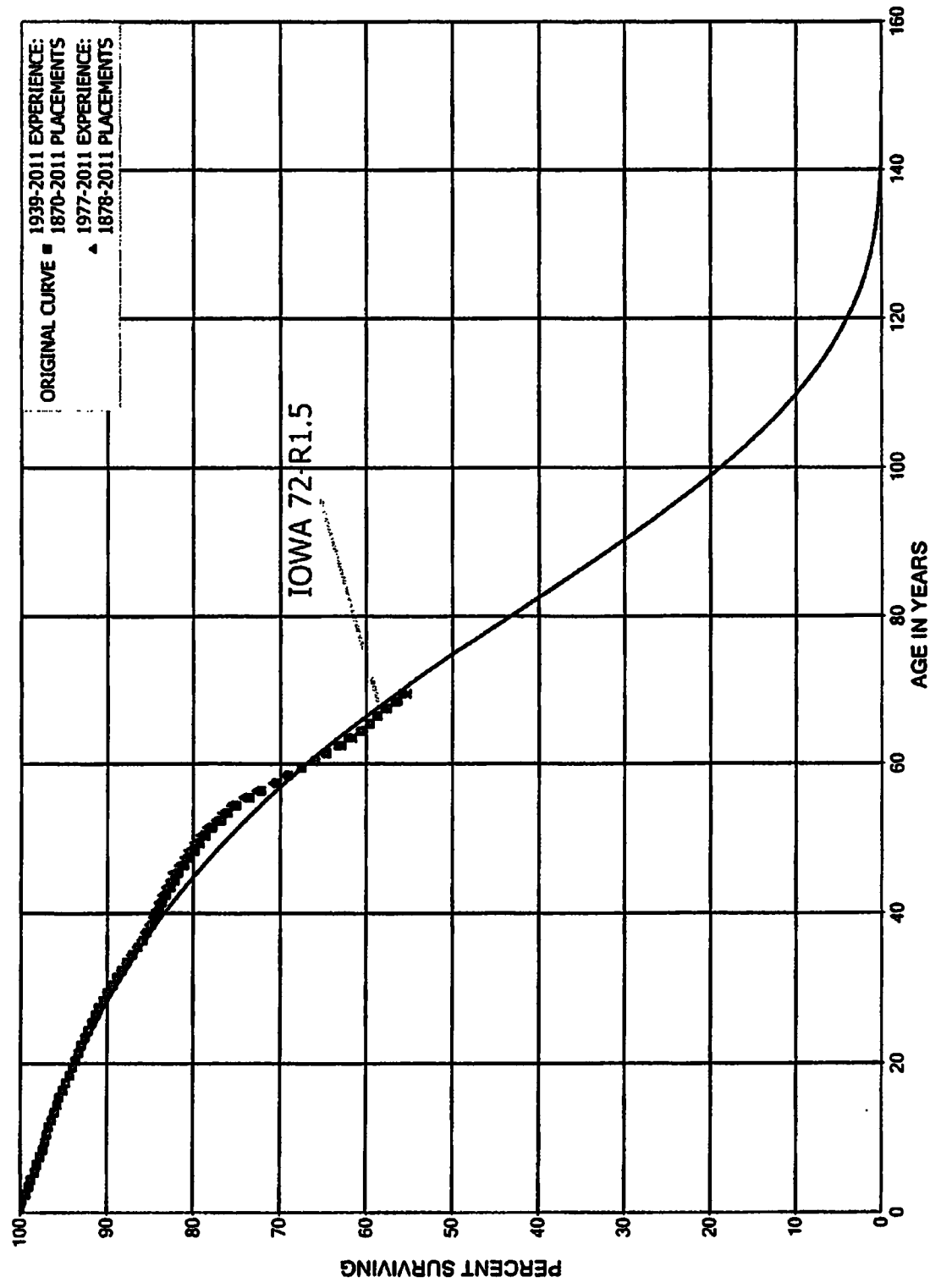
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.8 STRUCTURES AND IMPROVEMENTS - COMMUNICATION STRUCTURES

ORIGINAL LIFE TABLE

PLACEMENT BAND 2001-2001			EXPERIENCE BAND 2001-2011		
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	16,515		0.0000	1.0000	100.00
0.5	16,515		0.0000	1.0000	100.00
1.5	16,515		0.0000	1.0000	100.00
2.5	16,515		0.0000	1.0000	100.00
3.5	16,515		0.0000	1.0000	100.00
4.5	16,515		0.0000	1.0000	100.00
5.5	16,515		0.0000	1.0000	100.00
6.5	16,515		0.0000	1.0000	100.00
7.5	16,515		0.0000	1.0000	100.00
8.5	16,515		0.0000	1.0000	100.00
9.5	16,515		0.0000	1.0000	100.00
10.5					100.00

COLUMBIA GAS OF PENNSYLVANIA, INC.  
 ACCOUNTS 376.1, 376.3 AND 376.45 MAINS  
 ORIGINAL AND SMOOTH SURVIVOR CURVES



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 376.1, 376.3 AND 376.45 MAINS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1870-2011			EXPERIENCE BAND 1939-2011		
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	692,739,161	304,313	0.0004	0.9996	100.00
0.5	613,798,720	1,211,248	0.0020	0.9980	99.96
1.5	567,143,548	2,407,737	0.0042	0.9958	99.76
2.5	531,973,220	1,912,763	0.0036	0.9964	99.34
3.5	474,821,381	1,464,765	0.0031	0.9969	98.98
4.5	441,888,968	1,662,538	0.0038	0.9962	98.67
5.5	419,313,101	1,106,778	0.0026	0.9974	98.30
6.5	395,929,424	1,266,310	0.0032	0.9968	98.04
7.5	377,799,018	1,098,685	0.0029	0.9971	97.73
8.5	369,587,628	1,087,156	0.0029	0.9971	97.44
9.5	362,294,472	778,594	0.0021	0.9979	97.16
10.5	353,905,640	890,141	0.0025	0.9975	96.95
11.5	332,310,106	1,202,902	0.0036	0.9964	96.71
12.5	321,259,838	1,027,525	0.0032	0.9968	96.35
13.5	309,159,055	952,544	0.0031	0.9969	96.05
14.5	295,039,010	880,829	0.0030	0.9970	95.75
15.5	283,487,170	1,158,038	0.0041	0.9959	95.47
16.5	272,642,074	893,868	0.0033	0.9967	95.08
17.5	260,611,562	1,320,773	0.0051	0.9949	94.76
18.5	250,354,794	960,791	0.0038	0.9962	94.28
19.5	241,175,215	915,916	0.0038	0.9962	93.92
20.5	232,553,545	750,470	0.0032	0.9968	93.56
21.5	224,168,765	752,348	0.0034	0.9966	93.26
22.5	214,480,134	940,962	0.0044	0.9956	92.95
23.5	203,358,506	866,315	0.0043	0.9957	92.54
24.5	193,672,508	857,423	0.0044	0.9956	92.15
25.5	183,802,998	888,681	0.0048	0.9952	91.74
26.5	174,593,797	736,202	0.0042	0.9958	91.30
27.5	164,902,781	903,022	0.0055	0.9945	90.91
28.5	156,429,187	839,636	0.0054	0.9946	90.41
29.5	145,807,583	995,027	0.0068	0.9932	89.93
30.5	134,883,789	793,533	0.0059	0.9941	89.31
31.5	125,337,565	729,982	0.0058	0.9942	88.79
32.5	117,908,994	717,972	0.0061	0.9939	88.27
33.5	111,332,018	819,169	0.0074	0.9926	87.73
34.5	104,610,868	793,055	0.0076	0.9924	87.09
35.5	100,686,848	640,475	0.0064	0.9936	86.43
36.5	97,021,859	589,240	0.0061	0.9939	85.88
37.5	93,748,796	578,060	0.0062	0.9938	85.36
38.5	89,849,968	453,919	0.0051	0.9949	84.83

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 376.1, 376.3 AND 376.45 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1870-2011			EXPERIENCE BAND 1939-2011		
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	87,332,438	415,458	0.0048	0.9952	84.40
40.5	82,760,009	393,583	0.0048	0.9952	84.00
41.5	80,567,053	409,180	0.0051	0.9949	83.60
42.5	77,069,508	488,245	0.0063	0.9937	83.18
43.5	73,112,764	381,385	0.0052	0.9948	82.65
44.5	68,712,201	409,396	0.0060	0.9940	82.22
45.5	63,950,007	551,310	0.0086	0.9914	81.73
46.5	60,250,909	452,332	0.0075	0.9925	81.02
47.5	55,690,520	372,607	0.0067	0.9933	80.42
48.5	51,305,835	378,138	0.0074	0.9926	79.88
49.5	47,777,236	406,388	0.0085	0.9915	79.29
50.5	43,700,054	452,143	0.0103	0.9897	78.61
51.5	39,969,228	493,213	0.0123	0.9877	77.80
52.5	36,307,573	391,966	0.0108	0.9892	76.84
53.5	31,951,017	407,503	0.0128	0.9872	76.01
54.5	28,225,231	568,575	0.0201	0.9799	75.04
55.5	25,320,932	475,188	0.0188	0.9812	73.53
56.5	20,258,075	483,835	0.0239	0.9761	72.15
57.5	17,961,609	340,817	0.0190	0.9810	70.43
58.5	16,252,926	363,853	0.0224	0.9776	69.09
59.5	13,555,455	311,167	0.0230	0.9770	67.54
60.5	12,280,227	240,000	0.0195	0.9805	65.99
61.5	10,541,503	225,703	0.0214	0.9786	64.70
62.5	9,289,932	161,855	0.0174	0.9826	63.32
63.5	8,823,702	217,562	0.0247	0.9753	62.22
64.5	8,579,374	128,973	0.0150	0.9850	60.68
65.5	8,410,239	123,773	0.0147	0.9853	59.77
66.5	8,271,593	145,577	0.0176	0.9824	58.89
67.5	8,100,570	153,210	0.0189	0.9811	57.85
68.5	8,025,333	133,101	0.0166	0.9834	56.76
69.5	7,852,399	212,912	0.0271	0.9729	55.82
70.5	7,460,475	118,647	0.0159	0.9841	54.30
71.5	7,270,509	132,120	0.0182	0.9818	53.44
72.5	6,901,179	147,847	0.0214	0.9786	52.47
73.5	6,906,204	111,230	0.0161	0.9839	51.35
74.5	6,879,669	117,877	0.0171	0.9829	50.52
75.5	6,731,660	114,778	0.0171	0.9829	49.65
76.5	6,606,263	146,500	0.0222	0.9778	48.81
77.5	6,407,090	114,823	0.0179	0.9821	47.72
78.5	6,258,535	161,720	0.0258	0.9742	46.87

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 376.1, 376.3 AND 376.45 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1870-2011			EXPERIENCE BAND 1939-2011		
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	5,993,550	180,564	0.0301	0.9699	45.66
80.5	5,650,549	246,850	0.0437	0.9563	44.28
81.5	5,225,426	121,063	0.0232	0.9768	42.35
82.5	4,861,700	174,954	0.0360	0.9640	41.37
83.5	4,498,217	99,990	0.0222	0.9778	39.88
84.5	4,265,854	160,235	0.0376	0.9624	38.99
85.5	3,926,669	137,924	0.0351	0.9649	37.53
86.5	3,629,868	114,382	0.0315	0.9685	36.21
87.5	3,338,304	72,571	0.0217	0.9783	35.07
88.5	3,123,684	51,435	0.0165	0.9835	34.31
89.5	3,011,500	64,126	0.0213	0.9787	33.74
90.5	2,904,798	60,799	0.0209	0.9791	33.02
91.5	2,826,734	74,295	0.0263	0.9737	32.33
92.5	2,734,297	64,418	0.0236	0.9764	31.48
93.5	2,653,475	63,749	0.0240	0.9760	30.74
94.5	2,458,030	83,941	0.0341	0.9659	30.00
95.5	2,351,795	56,718	0.0241	0.9759	28.98
96.5	2,268,372	56,399	0.0249	0.9751	28.28
97.5	2,177,608	58,779	0.0270	0.9730	27.57
98.5	2,039,734	37,557	0.0184	0.9816	26.83
99.5	1,983,717	31,142	0.0157	0.9843	26.34
100.5	1,924,227	52,705	0.0274	0.9726	25.92
101.5	1,846,136	25,800	0.0140	0.9860	25.21
102.5	1,793,836	70,703	0.0394	0.9606	24.86
103.5	1,685,001	63,598	0.0377	0.9623	23.88
104.5	1,534,359	51,208	0.0334	0.9666	22.98
105.5	1,454,432	30,576	0.0210	0.9790	22.21
106.5	1,380,825	42,819	0.0310	0.9690	21.75
107.5	1,288,528	29,078	0.0226	0.9774	21.07
108.5	1,211,814	9,919	0.0082	0.9918	20.60
109.5	1,136,906	15,536	0.0137	0.9863	20.43
110.5	1,077,040	39,317	0.0365	0.9635	20.15
111.5	911,292	20,012	0.0220	0.9780	19.41
112.5	866,473	22,129	0.0255	0.9745	18.99
113.5	779,346	39,452	0.0506	0.9494	18.50
114.5	726,927	30,679	0.0422	0.9578	17.56
115.5	609,455	2,291	0.0038	0.9962	16.82
116.5	604,783	3,244	0.0054	0.9946	16.76
117.5	562,970	3,780	0.0067	0.9933	16.67
118.5	504,554	2,928	0.0058	0.9942	16.56



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 376.1, 376.3 AND 376.45 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1870-2011

EXPERIENCE BAND 1939-2011

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	485,673	23,607	0.0486	0.9514	16.46
120.5	451,671	34,274	0.0759	0.9241	15.66
121.5	394,978	17,962	0.0455	0.9545	14.47
122.5	372,529	23,866	0.0641	0.9359	13.82
123.5	309,241	39,601	0.1281	0.8719	12.93
124.5	206,060	9,622	0.0467	0.9533	11.27
125.5	114,027	2,265	0.0199	0.9801	10.75
126.5	70,369		0.0000	1.0000	10.53
127.5	63,473		0.0000	1.0000	10.53
128.5	4,652		0.0000	1.0000	10.53
129.5	4,119		0.0000	1.0000	10.53
130.5	4,075		0.0000	1.0000	10.53
131.5	355		0.0000	1.0000	10.53
132.5	130		0.0000	1.0000	10.53
133.5					10.53

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 376.1, 376.3 AND 376.45 MAINS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1878-2011

EXPERIENCE BAND 1977-2011

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	606,222,217	274,024	0.0005	0.9995	100.00
0.5	529,562,391	987,819	0.0019	0.9981	99.95
1.5	484,866,514	2,254,810	0.0047	0.9953	99.77
2.5	450,582,878	1,700,094	0.0038	0.9962	99.30
3.5	396,403,129	1,311,371	0.0033	0.9967	98.93
4.5	362,962,614	1,475,030	0.0041	0.9959	98.60
5.5	344,099,366	944,276	0.0027	0.9973	98.20
6.5	321,280,846	1,156,463	0.0036	0.9964	97.93
7.5	304,442,873	917,884	0.0030	0.9970	97.58
8.5	299,160,420	951,056	0.0032	0.9968	97.29
9.5	295,281,336	627,648	0.0021	0.9979	96.98
10.5	291,069,226	756,795	0.0026	0.9974	96.77
11.5	272,278,887	1,051,104	0.0039	0.9961	96.52
12.5	264,750,440	833,389	0.0031	0.9969	96.15
13.5	256,884,384	789,738	0.0031	0.9969	95.84
14.5	246,042,897	778,510	0.0032	0.9968	95.55
15.5	238,531,484	991,816	0.0042	0.9958	95.25
16.5	231,010,732	747,737	0.0032	0.9968	94.85
17.5	222,741,443	1,144,655	0.0051	0.9949	94.54
18.5	216,619,876	789,754	0.0036	0.9964	94.06
19.5	211,091,245	645,222	0.0031	0.9969	93.71
20.5	206,131,919	598,588	0.0029	0.9971	93.43
21.5	203,378,687	652,633	0.0032	0.9968	93.16
22.5	196,396,171	809,720	0.0041	0.9959	92.86
23.5	187,652,157	774,091	0.0041	0.9959	92.47
24.5	181,766,049	796,415	0.0044	0.9956	92.09
25.5	173,429,424	785,132	0.0045	0.9955	91.69
26.5	166,647,411	683,485	0.0041	0.9959	91.27
27.5	158,709,884	829,506	0.0052	0.9948	90.90
28.5	150,804,484	776,121	0.0051	0.9949	90.43
29.5	140,067,207	934,864	0.0067	0.9933	89.96
30.5	129,246,272	726,334	0.0056	0.9944	89.36
31.5	119,585,806	642,372	0.0054	0.9946	88.86
32.5	112,059,047	666,888	0.0060	0.9940	88.38
33.5	105,416,827	720,329	0.0068	0.9932	87.85
34.5	98,755,594	724,130	0.0073	0.9927	87.25
35.5	94,953,256	571,015	0.0060	0.9940	86.61
36.5	91,229,655	515,019	0.0056	0.9944	86.09
37.5	87,968,767	497,828	0.0057	0.9943	85.61
38.5	84,009,868	383,257	0.0046	0.9954	85.12

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 376.1, 376.3 AND 376.45 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1878-2011			EXPERIENCE BAND 1977-2011		
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	81,509,845	327,078	0.0040	0.9960	84.73
40.5	77,028,576	341,775	0.0044	0.9956	84.39
41.5	74,888,342	344,373	0.0046	0.9954	84.02
42.5	71,413,839	393,912	0.0055	0.9945	83.63
43.5	67,558,807	327,663	0.0049	0.9951	83.17
44.5	63,114,636	314,497	0.0050	0.9950	82.77
45.5	58,505,997	486,643	0.0083	0.9917	82.36
46.5	55,207,375	393,667	0.0071	0.9929	81.67
47.5	51,196,623	331,894	0.0065	0.9935	81.09
48.5	47,116,553	336,838	0.0071	0.9929	80.56
49.5	43,884,671	357,957	0.0082	0.9918	79.99
50.5	40,097,894	411,523	0.0103	0.9897	79.33
51.5	36,582,769	461,189	0.0126	0.9874	78.52
52.5	33,055,100	351,340	0.0106	0.9894	77.53
53.5	28,865,925	357,821	0.0124	0.9876	76.71
54.5	25,160,572	502,201	0.0200	0.9800	75.76
55.5	21,790,954	444,805	0.0204	0.9796	74.24
56.5	16,668,555	441,293	0.0265	0.9735	72.73
57.5	14,371,496	296,180	0.0206	0.9794	70.80
58.5	12,445,887	321,061	0.0258	0.9742	69.34
59.5	9,690,355	230,911	0.0238	0.9762	67.55
60.5	8,405,824	200,503	0.0239	0.9761	65.95
61.5	6,748,899	172,708	0.0256	0.9744	64.37
62.5	5,605,824	105,355	0.0188	0.9812	62.72
63.5	5,781,088	116,057	0.0201	0.9799	61.55
64.5	5,590,126	87,111	0.0156	0.9844	60.31
65.5	5,414,027	80,483	0.0149	0.9851	59.37
66.5	5,361,135	102,785	0.0192	0.9808	58.49
67.5	5,288,614	109,221	0.0207	0.9793	57.37
68.5	5,199,000	99,458	0.0191	0.9809	56.18
69.5	5,134,495	163,778	0.0319	0.9681	55.11
70.5	4,822,641	69,840	0.0145	0.9855	53.35
71.5	4,704,429	84,689	0.0180	0.9820	52.58
72.5	4,493,700	77,859	0.0173	0.9827	51.63
73.5	4,467,878	77,137	0.0173	0.9827	50.74
74.5	4,435,738	84,136	0.0190	0.9810	49.86
75.5	4,602,216	95,571	0.0208	0.9792	48.91
76.5	4,685,274	117,351	0.0250	0.9750	47.90
77.5	4,564,907	92,270	0.0202	0.9798	46.70
78.5	4,556,291	142,285	0.0312	0.9688	45.75

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 376.1, 376.3 AND 376.45 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1878-2011			EXPERIENCE BAND 1977-2011		
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	4,387,095	154,141	0.0351	0.9649	44.33
80.5	4,185,582	205,301	0.0490	0.9510	42.77
81.5	3,827,278	94,557	0.0247	0.9753	40.67
82.5	3,575,265	123,160	0.0344	0.9656	39.67
83.5	3,370,857	71,411	0.0212	0.9788	38.30
84.5	3,232,386	151,290	0.0468	0.9532	37.49
85.5	2,948,347	115,289	0.0391	0.9609	35.73
86.5	2,777,925	93,132	0.0335	0.9665	34.34
87.5	2,550,332	59,609	0.0234	0.9766	33.19
88.5	2,462,118	49,864	0.0203	0.9797	32.41
89.5	2,591,266	63,279	0.0244	0.9756	31.75
90.5	2,668,641	57,575	0.0216	0.9784	30.98
91.5	2,689,408	73,691	0.0274	0.9726	30.31
92.5	2,642,689	64,024	0.0242	0.9758	29.48
93.5	2,647,886	63,749	0.0241	0.9759	28.76
94.5	2,452,986	83,941	0.0342	0.9658	28.07
95.5	2,347,353	56,685	0.0241	0.9759	27.11
96.5	2,267,912	56,399	0.0249	0.9751	26.46
97.5	2,177,425	58,779	0.0270	0.9730	25.80
98.5	2,039,734	37,557	0.0184	0.9816	25.10
99.5	1,983,717	31,142	0.0157	0.9843	24.64
100.5	1,924,227	52,705	0.0274	0.9726	24.25
101.5	1,846,136	25,800	0.0140	0.9860	23.59
102.5	1,793,836	70,703	0.0394	0.9606	23.26
103.5	1,685,001	63,598	0.0377	0.9623	22.34
104.5	1,534,359	51,208	0.0334	0.9666	21.50
105.5	1,454,432	30,576	0.0210	0.9790	20.78
106.5	1,380,825	42,819	0.0310	0.9690	20.34
107.5	1,288,528	29,078	0.0226	0.9774	19.71
108.5	1,211,814	9,919	0.0082	0.9918	19.27
109.5	1,136,906	15,536	0.0137	0.9863	19.11
110.5	1,077,040	39,317	0.0365	0.9635	18.85
111.5	911,292	20,012	0.0220	0.9780	18.16
112.5	866,473	22,129	0.0255	0.9745	17.76
113.5	779,346	39,452	0.0506	0.9494	17.31
114.5	726,927	30,679	0.0422	0.9578	16.43
115.5	609,455	2,291	0.0038	0.9962	15.74
116.5	604,783	3,244	0.0054	0.9946	15.68
117.5	562,970	3,780	0.0067	0.9933	15.60
118.5	504,554	2,928	0.0058	0.9942	15.49

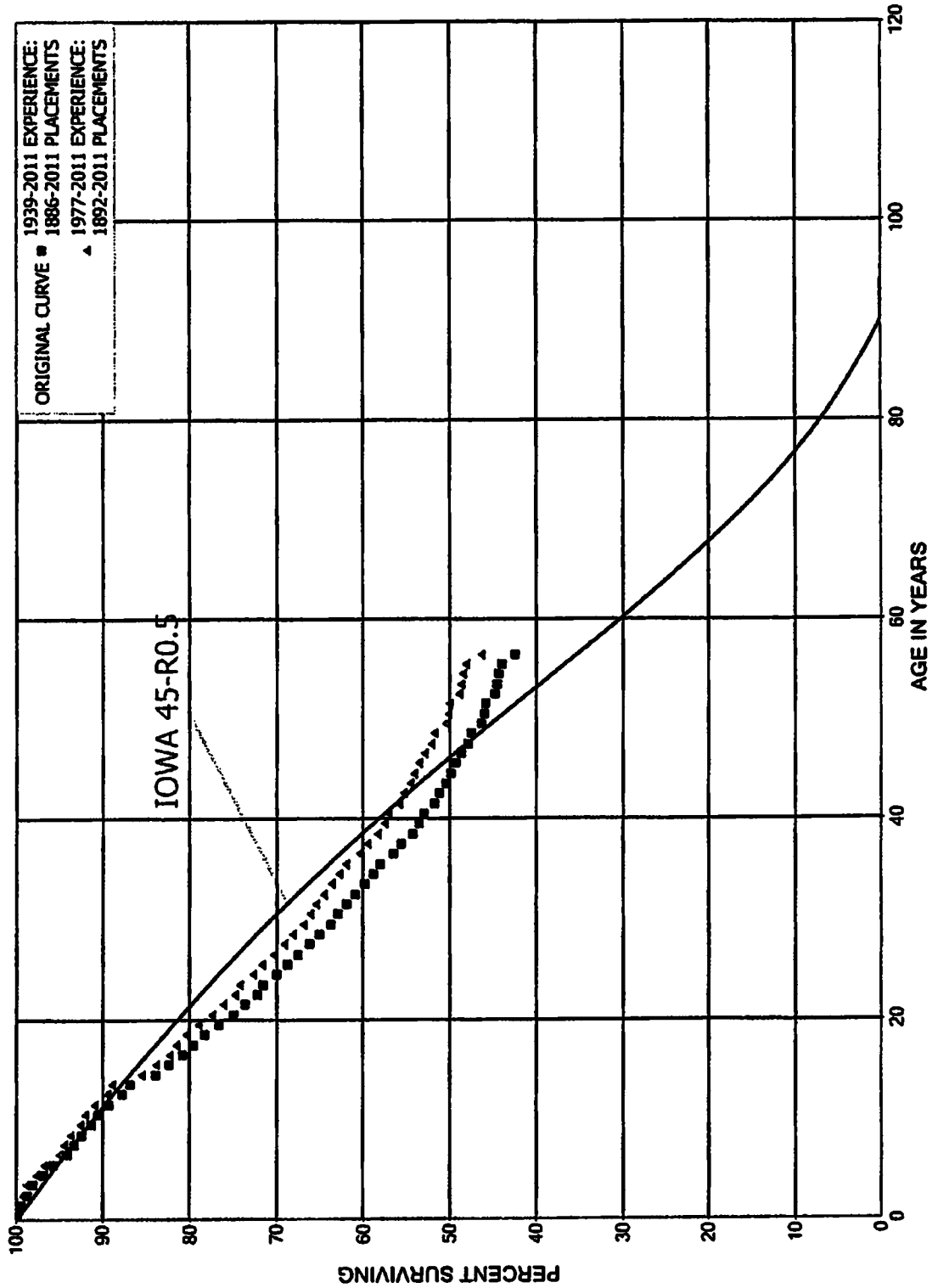
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 376.1, 376.3 AND 376.45 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1878-2011			EXPERIENCE BAND 1977-2011		
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	485,673	23,607	0.0486	0.9514	15.40
120.5	451,671	34,274	0.0759	0.9241	14.65
121.5	394,978	17,962	0.0455	0.9545	13.54
122.5	372,529	23,866	0.0641	0.9359	12.93
123.5	309,241	39,601	0.1281	0.8719	12.10
124.5	206,060	9,622	0.0467	0.9533	10.55
125.5	114,027	2,265	0.0199	0.9801	10.06
126.5	70,369		0.0000	1.0000	9.86
127.5	63,473		0.0000	1.0000	9.86
128.5	4,652		0.0000	1.0000	9.86
129.5	4,119		0.0000	1.0000	9.86
130.5	4,075		0.0000	1.0000	9.86
131.5	355		0.0000	1.0000	9.86
132.5	130		0.0000	1.0000	9.86
133.5					9.86

COLUMBIA GAS OF PENNSYLVANIA, INC.  
 ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT  
 ORIGINAL AND SMOOTH SURVIVOR CURVES



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1886-2011			EXPERIENCE BAND 1939-2011		
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	19,940,592	31,328	0.0016	0.9984	100.00
0.5	18,253,619	72,949	0.0040	0.9960	99.84
1.5	16,697,249	126,281	0.0076	0.9924	99.44
2.5	16,067,357	102,690	0.0064	0.9936	98.69
3.5	14,754,559	188,311	0.0128	0.9872	98.06
4.5	13,964,023	159,929	0.0115	0.9885	96.81
5.5	13,234,183	233,296	0.0176	0.9824	95.70
6.5	12,874,682	94,083	0.0073	0.9927	94.01
7.5	12,637,803	122,658	0.0097	0.9903	93.33
8.5	12,141,629	147,875	0.0122	0.9878	92.42
9.5	11,710,415	108,284	0.0092	0.9908	91.30
10.5	11,379,921	143,613	0.0126	0.9874	90.45
11.5	10,301,948	178,228	0.0173	0.9827	89.31
12.5	9,583,365	100,794	0.0105	0.9895	87.76
13.5	9,261,854	304,503	0.0329	0.9671	86.84
14.5	8,763,494	169,683	0.0194	0.9806	83.99
15.5	8,111,796	155,507	0.0192	0.9808	82.36
16.5	7,759,981	113,857	0.0147	0.9853	80.78
17.5	7,353,947	118,382	0.0161	0.9839	79.60
18.5	7,079,057	151,728	0.0214	0.9786	78.31
19.5	6,814,403	148,002	0.0217	0.9783	76.64
20.5	6,425,753	120,457	0.0187	0.9813	74.97
21.5	6,045,353	112,553	0.0186	0.9814	73.57
22.5	5,707,676	55,741	0.0098	0.9902	72.20
23.5	5,229,638	114,415	0.0219	0.9781	71.49
24.5	4,906,306	80,798	0.0165	0.9835	69.93
25.5	4,590,577	87,466	0.0191	0.9809	68.78
26.5	4,234,772	80,493	0.0190	0.9810	67.47
27.5	3,934,026	67,099	0.0171	0.9829	66.18
28.5	3,736,261	75,085	0.0201	0.9799	65.05
29.5	3,393,002	44,327	0.0131	0.9869	63.75
30.5	3,199,719	48,261	0.0151	0.9849	62.91
31.5	3,058,106	49,432	0.0162	0.9838	61.97
32.5	2,944,318	52,965	0.0180	0.9820	60.96
33.5	2,831,450	46,357	0.0164	0.9836	59.87
34.5	2,702,481	37,191	0.0138	0.9862	58.89
35.5	2,588,208	71,171	0.0275	0.9725	58.08
36.5	2,440,557	38,567	0.0158	0.9842	56.48
37.5	2,289,818	53,438	0.0233	0.9767	55.59
38.5	2,127,678	32,667	0.0154	0.9846	54.29

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1886-2011			EXPERIENCE BAND 1939-2011		
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	1,967,296	17,651	0.0090	0.9910	53.46
40.5	1,768,711	41,367	0.0234	0.9766	52.98
41.5	1,681,020	18,786	0.0112	0.9888	51.74
42.5	1,574,144	24,924	0.0158	0.9842	51.16
43.5	1,499,350	15,820	0.0106	0.9894	50.35
44.5	1,423,575	15,033	0.0106	0.9894	49.82
45.5	1,327,140	17,771	0.0134	0.9866	49.29
46.5	1,251,449	21,137	0.0169	0.9831	48.63
47.5	1,130,645	7,426	0.0066	0.9934	47.81
48.5	1,023,473	26,366	0.0258	0.9742	47.50
49.5	890,514	6,835	0.0077	0.9923	46.27
50.5	769,734	2,218	0.0029	0.9971	45.92
51.5	677,333	15,071	0.0223	0.9777	45.79
52.5	598,368	3,306	0.0055	0.9945	44.77
53.5	533,109	2,759	0.0052	0.9948	44.52
54.5	469,817	3,303	0.0070	0.9930	44.29
55.5	408,923	15,121	0.0370	0.9630	43.98
56.5	217,330	1,764	0.0081	0.9919	42.35
57.5	175,712	783	0.0045	0.9955	42.01
58.5	126,443	2,716	0.0215	0.9785	41.82
59.5	55,312	1,709	0.0309	0.9691	40.92
60.5	36,222	2,045	0.0565	0.9435	39.66
61.5	19,850	546	0.0275	0.9725	37.42
62.5	17,445	511	0.0293	0.9707	36.39
63.5	16,573	87	0.0053	0.9947	35.32
64.5	15,694	64	0.0041	0.9959	35.14
65.5	15,464	405	0.0262	0.9738	34.99
66.5	14,569	153	0.0105	0.9895	34.08
67.5	12,449	712	0.0572	0.9428	33.72
68.5	11,616	168	0.0145	0.9855	31.79
69.5	10,896	172	0.0158	0.9842	31.33
70.5	7,574	31	0.0040	0.9960	30.84
71.5	6,513	86	0.0132	0.9868	30.71
72.5	5,512	167	0.0303	0.9697	30.31
73.5	4,708	145	0.0308	0.9692	29.39
74.5	4,563	108	0.0237	0.9763	28.48
75.5	4,194	4	0.0010	0.9990	27.81
76.5	3,907		0.0000	1.0000	27.78
77.5	3,250	29	0.0089	0.9911	27.78
78.5	2,758		0.0000	1.0000	27.53



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1886-2011			EXPERIENCE BAND 1939-2011		
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	2,148		0.0000	1.0000	27.53
80.5	1,959		0.0000	1.0000	27.53
81.5	1,754		0.0000	1.0000	27.53
82.5	1,203	69	0.0573	0.9427	27.53
83.5	1,001		0.0000	1.0000	25.95
84.5	1,001		0.0000	1.0000	25.95
85.5	986		0.0000	1.0000	25.95
86.5	986		0.0000	1.0000	25.95
87.5	986		0.0000	1.0000	25.95
88.5	986		0.0000	1.0000	25.95
89.5	986		0.0000	1.0000	25.95
90.5	986		0.0000	1.0000	25.95
91.5	900		0.0000	1.0000	25.95
92.5	900		0.0000	1.0000	25.95
93.5	900		0.0000	1.0000	25.95
94.5	900		0.0000	1.0000	25.95
95.5	900		0.0000	1.0000	25.95
96.5	900	18	0.0198	0.9802	25.95
97.5	795		0.0000	1.0000	25.44
98.5	795		0.0000	1.0000	25.44
99.5	757		0.0000	1.0000	25.44
100.5	757		0.0000	1.0000	25.44
101.5	757		0.0000	1.0000	25.44
102.5	757		0.0000	1.0000	25.44
103.5	757		0.0000	1.0000	25.44
104.5	757		0.0000	1.0000	25.44
105.5	757		0.0000	1.0000	25.44
106.5	757		0.0000	1.0000	25.44
107.5	757		0.0000	1.0000	25.44
108.5	757		0.0000	1.0000	25.44
109.5	757		0.0000	1.0000	25.44
110.5	757		0.0000	1.0000	25.44
111.5	757		0.0000	1.0000	25.44
112.5	757		0.0000	1.0000	25.44
113.5	757		0.0000	1.0000	25.44
114.5	757		0.0000	1.0000	25.44
115.5	757		0.0000	1.0000	25.44
116.5	757		0.0000	1.0000	25.44
117.5	757		0.0000	1.0000	25.44

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1892-2011			EXPERIENCE BAND 1977-2011		
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	16,224,953		0.0000	1.0000	100.00
0.5	14,643,955	39,064	0.0027	0.9973	100.00
1.5	13,208,746	84,608	0.0064	0.9936	99.73
2.5	12,726,814	57,432	0.0045	0.9955	99.09
3.5	11,505,790	137,940	0.0120	0.9880	98.65
4.5	10,981,736	101,605	0.0093	0.9907	97.46
5.5	10,404,294	185,263	0.0178	0.9822	96.56
6.5	10,119,183	65,012	0.0064	0.9936	94.84
7.5	9,854,630	75,498	0.0077	0.9923	94.23
8.5	9,413,423	110,752	0.0118	0.9882	93.51
9.5	8,967,140	51,246	0.0057	0.9943	92.41
10.5	8,797,788	112,472	0.0128	0.9872	91.88
11.5	7,811,311	121,837	0.0156	0.9844	90.71
12.5	7,292,887	50,491	0.0069	0.9931	89.29
13.5	7,152,550	268,586	0.0376	0.9624	88.68
14.5	6,867,577	131,333	0.0191	0.9809	85.35
15.5	6,455,892	121,738	0.0189	0.9811	83.71
16.5	6,320,814	56,864	0.0090	0.9910	82.14
17.5	6,121,015	87,655	0.0143	0.9857	81.40
18.5	6,081,448	102,521	0.0169	0.9831	80.23
19.5	5,948,514	121,012	0.0203	0.9797	78.88
20.5	5,661,521	95,104	0.0168	0.9832	77.27
21.5	5,528,315	95,086	0.0172	0.9828	75.98
22.5	5,260,458	42,127	0.0080	0.9920	74.67
23.5	4,877,463	101,834	0.0209	0.9791	74.07
24.5	4,683,900	69,359	0.0148	0.9852	72.52
25.5	4,398,507	76,151	0.0173	0.9827	71.45
26.5	4,076,224	71,565	0.0176	0.9824	70.21
27.5	3,792,184	57,476	0.0152	0.9848	68.98
28.5	3,605,197	62,726	0.0174	0.9826	67.94
29.5	3,274,364	36,949	0.0113	0.9887	66.75
30.5	3,090,704	34,395	0.0111	0.9889	66.00
31.5	2,963,122	37,793	0.0128	0.9872	65.27
32.5	2,862,024	40,185	0.0140	0.9860	64.43
33.5	2,762,200	39,743	0.0144	0.9856	63.53
34.5	2,640,628	30,986	0.0117	0.9883	62.61
35.5	2,535,906	67,077	0.0265	0.9735	61.88
36.5	2,393,756	31,573	0.0132	0.9868	60.24
37.5	2,249,348	49,079	0.0218	0.9782	59.45
38.5	2,091,663	28,354	0.0136	0.9864	58.15

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1892-2011			EXPERIENCE BAND 1977-2011		
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	1,935,383	13,680	0.0071	0.9929	57.36
40.5	1,740,728	37,445	0.0215	0.9785	56.96
41.5	1,656,902	16,835	0.0102	0.9898	55.73
42.5	1,552,704	22,451	0.0145	0.9855	55.17
43.5	1,480,617	12,484	0.0084	0.9916	54.37
44.5	1,407,583	12,991	0.0092	0.9908	53.91
45.5	1,315,025	16,164	0.0123	0.9877	53.41
46.5	1,242,492	19,881	0.0160	0.9840	52.76
47.5	1,123,598	6,275	0.0056	0.9944	51.91
48.5	1,017,930	25,971	0.0255	0.9745	51.62
49.5	885,324	6,732	0.0076	0.9924	50.30
50.5	764,515	1,952	0.0026	0.9974	49.92
51.5	672,365	14,370	0.0214	0.9786	49.79
52.5	593,887	3,046	0.0051	0.9949	48.73
53.5	528,886	2,530	0.0048	0.9952	48.48
54.5	465,950	2,773	0.0060	0.9940	48.25
55.5	405,405	14,887	0.0367	0.9633	47.96
56.5	214,049	1,287	0.0060	0.9940	46.20
57.5	172,709	678	0.0039	0.9961	45.92
58.5	123,399	2,337	0.0189	0.9811	45.74
59.5	52,398	1,128	0.0215	0.9785	44.88
60.5	33,882	1,739	0.0513	0.9487	43.91
61.5	17,830	546	0.0306	0.9694	41.66
62.5	15,528	495	0.0319	0.9681	40.38
63.5	14,629	16	0.0011	0.9989	39.09
64.5	13,860	31	0.0023	0.9977	39.05
65.5	13,566	390	0.0287	0.9713	38.96
66.5	12,701		0.0000	1.0000	37.84
67.5	10,772	236	0.0219	0.9781	37.84
68.5	10,404	168	0.0162	0.9838	37.01
69.5	9,721	134	0.0138	0.9862	36.41
70.5	6,484	15	0.0023	0.9977	35.91
71.5	5,440	70	0.0128	0.9872	35.83
72.5	4,454	152	0.0342	0.9658	35.37
73.5	3,666	145	0.0395	0.9605	34.16
74.5	3,521	108	0.0307	0.9693	32.81
75.5	3,151	4	0.0013	0.9987	31.80
76.5	3,132		0.0000	1.0000	31.76
77.5	2,475	29	0.0117	0.9883	31.76
78.5	1,969		0.0000	1.0000	31.39

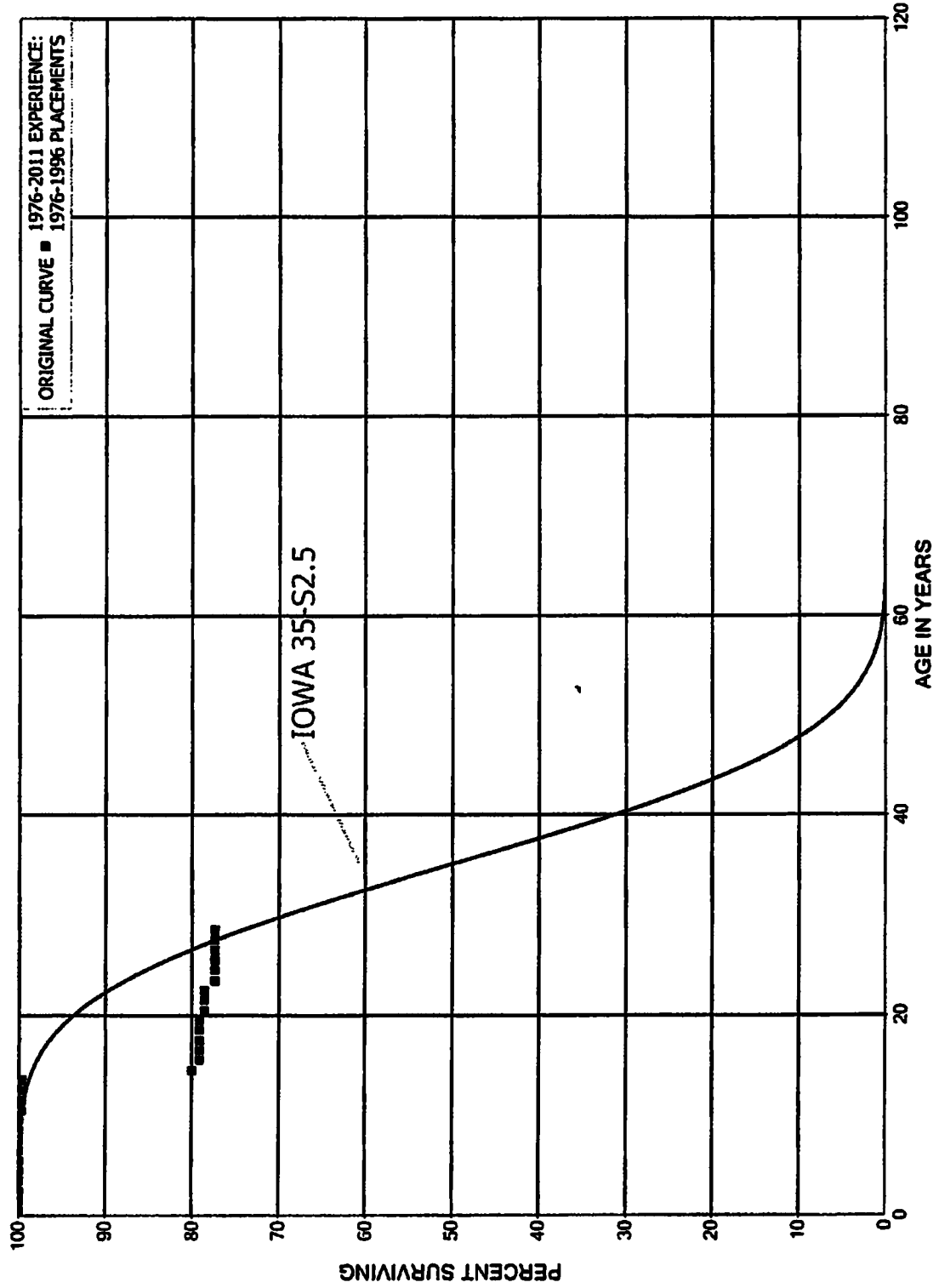
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1892-2011			EXPERIENCE BAND 1977-2011		
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	1,358		0.0000	1.0000	31.39
80.5	1,169		0.0000	1.0000	31.39
81.5	964		0.0000	1.0000	31.39
82.5	1,170	69	0.0589	0.9411	31.39
83.5	968		0.0000	1.0000	29.54
84.5	986		0.0000	1.0000	29.54
85.5	986		0.0000	1.0000	29.54
86.5	986		0.0000	1.0000	29.54
87.5	986		0.0000	1.0000	29.54
88.5	986		0.0000	1.0000	29.54
89.5	986		0.0000	1.0000	29.54
90.5	986		0.0000	1.0000	29.54
91.5	900		0.0000	1.0000	29.54
92.5	900		0.0000	1.0000	29.54
93.5	900		0.0000	1.0000	29.54
94.5	900		0.0000	1.0000	29.54
95.5	900		0.0000	1.0000	29.54
96.5	900	18	0.0198	0.9802	29.54
97.5	795		0.0000	1.0000	28.95
98.5	795		0.0000	1.0000	28.95
99.5	757		0.0000	1.0000	28.95
100.5	757		0.0000	1.0000	28.95
101.5	757		0.0000	1.0000	28.95
102.5	757		0.0000	1.0000	28.95
103.5	757		0.0000	1.0000	28.95
104.5	757		0.0000	1.0000	28.95
105.5	757		0.0000	1.0000	28.95
106.5	757		0.0000	1.0000	28.95
107.5	757		0.0000	1.0000	28.95
108.5	757		0.0000	1.0000	28.95
109.5	757		0.0000	1.0000	28.95
110.5	757		0.0000	1.0000	28.95
111.5	757		0.0000	1.0000	28.95
112.5	757		0.0000	1.0000	28.95
113.5	757		0.0000	1.0000	28.95
114.5	757		0.0000	1.0000	28.95
115.5	757		0.0000	1.0000	28.95
116.5	757		0.0000	1.0000	28.95
117.5	757		0.0000	1.0000	28.95

COLUMBIA GAS OF PENNSYLVANIA, INC.  
ACCOUNT 379.1 MEASURING AND REGULATING EQUIPMENT - CITY GATE  
ORIGINAL AND SMOOTH SURVIVOR CURVES



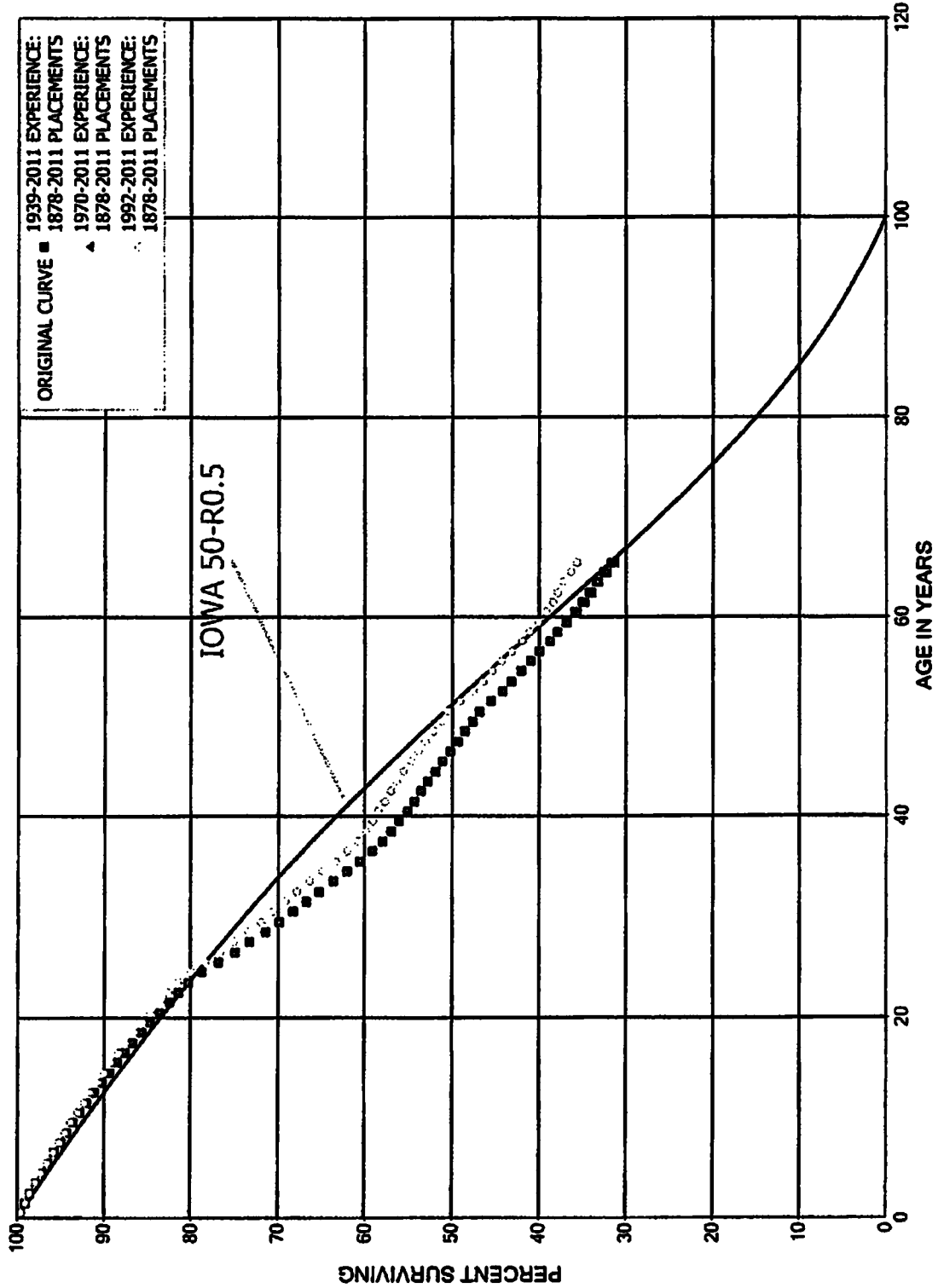
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 379.1 MEASURING AND REGULATING EQUIPMENT - CITY GATE

ORIGINAL LIFE TABLE

PLACEMENT BAND 1976-1996			EXPERIENCE BAND 1976-2011		
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	196,617		0.0000	1.0000	100.00
0.5	196,617		0.0000	1.0000	100.00
1.5	196,617		0.0000	1.0000	100.00
2.5	196,617		0.0000	1.0000	100.00
3.5	196,617		0.0000	1.0000	100.00
4.5	196,617		0.0000	1.0000	100.00
5.5	196,617		0.0000	1.0000	100.00
6.5	196,617		0.0000	1.0000	100.00
7.5	196,617		0.0000	1.0000	100.00
8.5	196,617		0.0000	1.0000	100.00
9.5	196,617	677	0.0034	0.9966	100.00
10.5	195,940		0.0000	1.0000	99.66
11.5	195,940		0.0000	1.0000	99.66
12.5	195,940		0.0000	1.0000	99.66
13.5	195,940	38,531	0.1966	0.8034	99.66
14.5	157,409	1,830	0.0116	0.9884	80.06
15.5	107,503		0.0000	1.0000	79.13
16.5	107,503		0.0000	1.0000	79.13
17.5	107,503		0.0000	1.0000	79.13
18.5	107,503		0.0000	1.0000	79.13
19.5	107,503	744	0.0069	0.9931	79.13
20.5	106,758		0.0000	1.0000	78.58
21.5	106,758		0.0000	1.0000	78.58
22.5	71,734	1,041	0.0145	0.9855	78.58
23.5	52,977		0.0000	1.0000	77.44
24.5	39,077		0.0000	1.0000	77.44
25.5	39,077		0.0000	1.0000	77.44
26.5	39,077		0.0000	1.0000	77.44
27.5	33,104		0.0000	1.0000	77.44
28.5	591		0.0000	1.0000	77.44
29.5	591		0.0000	1.0000	77.44
30.5	591		0.0000	1.0000	77.44
31.5	591		0.0000	1.0000	77.44
32.5	591		0.0000	1.0000	77.44
33.5	591		0.0000	1.0000	77.44
34.5	591		0.0000	1.0000	77.44
35.5					77.44

COLUMBIA GAS OF PENNSYLVANIA, INC.  
 ACCOUNTS 380.3 AND 380.45 SERVICES  
 ORIGINAL AND SMOOTH SURVIVOR CURVES



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 380.3 AND 380.45 SERVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1878-2011			EXPERIENCE BAND 1939-2011		
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	331,832,974	1,104,100	0.0033	0.9967	100.00
0.5	306,910,638	2,012,099	0.0066	0.9934	99.67
1.5	288,272,576	1,521,856	0.0053	0.9947	99.01
2.5	271,846,932	1,942,571	0.0071	0.9929	98.49
3.5	253,807,230	1,761,873	0.0069	0.9931	97.79
4.5	238,245,760	1,691,377	0.0071	0.9929	97.11
5.5	226,473,524	1,689,667	0.0075	0.9925	96.42
6.5	214,454,086	1,555,261	0.0073	0.9927	95.70
7.5	203,617,816	1,519,675	0.0075	0.9925	95.01
8.5	195,489,806	1,598,280	0.0082	0.9918	94.30
9.5	187,083,322	1,645,070	0.0088	0.9912	93.53
10.5	177,669,721	1,495,792	0.0084	0.9916	92.70
11.5	167,916,298	1,518,586	0.0090	0.9910	91.92
12.5	158,276,356	1,584,656	0.0100	0.9900	91.09
13.5	148,887,613	1,432,396	0.0096	0.9904	90.18
14.5	140,080,039	1,379,207	0.0098	0.9902	89.31
15.5	131,763,282	1,372,814	0.0104	0.9896	88.43
16.5	122,942,805	1,207,483	0.0098	0.9902	87.51
17.5	113,986,259	1,366,242	0.0120	0.9880	86.65
18.5	106,109,723	1,287,140	0.0121	0.9879	85.61
19.5	98,579,307	1,232,731	0.0125	0.9875	84.57
20.5	91,804,978	1,219,674	0.0133	0.9867	83.52
21.5	84,624,631	1,044,369	0.0123	0.9877	82.41
22.5	77,901,590	1,104,257	0.0142	0.9858	81.39
23.5	70,869,104	1,371,600	0.0194	0.9806	80.24
24.5	64,522,845	1,511,590	0.0234	0.9766	78.68
25.5	58,677,952	1,407,706	0.0240	0.9760	76.84
26.5	53,361,932	1,244,317	0.0233	0.9767	75.00
27.5	48,563,979	1,198,442	0.0247	0.9753	73.25
28.5	44,297,746	1,023,544	0.0231	0.9769	71.44
29.5	39,947,914	865,477	0.0217	0.9783	69.79
30.5	35,181,830	781,238	0.0222	0.9778	68.28
31.5	30,489,533	686,563	0.0225	0.9775	66.76
32.5	27,085,645	691,037	0.0255	0.9745	65.26
33.5	24,354,868	574,425	0.0236	0.9764	63.59
34.5	20,793,884	505,466	0.0243	0.9757	62.09
35.5	19,004,316	431,125	0.0227	0.9773	60.58
36.5	17,902,218	368,920	0.0206	0.9794	59.21
37.5	17,313,171	293,196	0.0169	0.9831	57.99
38.5	16,472,820	271,468	0.0165	0.9835	57.01



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 380.3 AND 380.45 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1878-2011			EXPERIENCE BAND 1939-2011		
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	15,483,761	263,572	0.0170	0.9830	56.07
40.5	14,456,310	216,577	0.0150	0.9850	55.11
41.5	13,447,383	196,316	0.0146	0.9854	54.29
42.5	12,401,696	187,125	0.0151	0.9849	53.50
43.5	11,101,728	173,119	0.0156	0.9844	52.69
44.5	9,909,069	161,066	0.0163	0.9837	51.87
45.5	8,718,479	145,006	0.0166	0.9834	51.02
46.5	7,776,150	132,110	0.0170	0.9830	50.18
47.5	6,868,001	111,514	0.0162	0.9838	49.32
48.5	6,030,036	114,659	0.0190	0.9810	48.52
49.5	5,278,927	89,769	0.0170	0.9830	47.60
50.5	4,549,757	125,643	0.0276	0.9724	46.79
51.5	3,893,118	109,538	0.0281	0.9719	45.50
52.5	3,196,488	78,452	0.0245	0.9755	44.22
53.5	2,739,943	67,150	0.0245	0.9755	43.13
54.5	2,372,226	61,455	0.0259	0.9741	42.08
55.5	1,999,072	52,250	0.0261	0.9739	40.99
56.5	1,683,749	47,984	0.0285	0.9715	39.91
57.5	1,459,363	36,697	0.0251	0.9749	38.78
58.5	1,307,893	34,792	0.0266	0.9734	37.80
59.5	1,151,633	29,454	0.0256	0.9744	36.80
60.5	1,011,832	24,547	0.0243	0.9757	35.85
61.5	897,432	21,022	0.0234	0.9766	34.98
62.5	808,300	19,373	0.0240	0.9760	34.17
63.5	742,453	18,550	0.0250	0.9750	33.35
64.5	688,134	18,100	0.0263	0.9737	32.51
65.5	651,471	17,957	0.0276	0.9724	31.66
66.5	626,797	16,306	0.0260	0.9740	30.79
67.5	603,796	16,039	0.0266	0.9734	29.98
68.5	579,843	14,253	0.0246	0.9754	29.19
69.5	546,974	15,623	0.0286	0.9714	28.47
70.5	510,191	13,918	0.0273	0.9727	27.66
71.5	478,034	13,176	0.0276	0.9724	26.90
72.5	445,210	13,899	0.0312	0.9688	26.16
73.5	419,553	12,268	0.0292	0.9708	25.34
74.5	400,113	12,292	0.0307	0.9693	24.60
75.5	382,194	12,551	0.0328	0.9672	23.85
76.5	366,178	11,791	0.0322	0.9678	23.06
77.5	350,506	13,026	0.0372	0.9628	22.32
78.5	333,360	11,591	0.0348	0.9652	21.49

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 380.3 AND 380.45 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1878-2011			EXPERIENCE BAND 1939-2011			
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	318,931	11,178	0.0350	0.9650	20.75	
80.5	303,525	10,733	0.0354	0.9646	20.02	
81.5	285,788	11,482	0.0402	0.9598	19.31	
82.5	263,872	9,421	0.0357	0.9643	18.53	
83.5	243,929	9,168	0.0376	0.9624	17.87	
84.5	224,721	9,394	0.0418	0.9582	17.20	
85.5	205,127	7,931	0.0387	0.9613	16.48	
86.5	186,670	8,088	0.0433	0.9567	15.84	
87.5	173,007	7,206	0.0416	0.9584	15.16	
88.5	160,066	5,509	0.0344	0.9656	14.53	
89.5	151,487	5,412	0.0357	0.9643	14.03	
90.5	144,757	5,883	0.0406	0.9594	13.53	
91.5	137,000	4,297	0.0314	0.9686	12.98	
92.5	130,772	3,974	0.0304	0.9696	12.57	
93.5	125,724	3,494	0.0278	0.9722	12.19	
94.5	120,902	3,610	0.0299	0.9701	11.85	
95.5	115,242	3,546	0.0308	0.9692	11.49	
96.5	108,650	3,240	0.0298	0.9702	11.14	
97.5	102,996	3,320	0.0322	0.9678	10.81	
98.5	97,255	2,737	0.0281	0.9719	10.46	
99.5	92,612	2,552	0.0276	0.9724	10.17	
100.5	87,960	2,852	0.0324	0.9676	9.89	
101.5	82,282	2,670	0.0324	0.9676	9.57	
102.5	77,130	4,321	0.0560	0.9440	9.25	
103.5	69,411	4,266	0.0615	0.9385	8.74	
104.5	62,316	3,764	0.0604	0.9396	8.20	
105.5	56,621	1,439	0.0254	0.9746	7.70	
106.5	53,100	1,361	0.0256	0.9744	7.51	
107.5	49,070	1,068	0.0218	0.9782	7.32	
108.5	46,034	594	0.0129	0.9871	7.16	
109.5	41,624	738	0.0177	0.9823	7.06	
110.5	39,725	358	0.0090	0.9910	6.94	
111.5	33,582	436	0.0130	0.9870	6.88	
112.5	31,404	1,008	0.0321	0.9679	6.79	
113.5	28,581	845	0.0296	0.9704	6.57	
114.5	27,291	1,079	0.0395	0.9605	6.38	
115.5	25,663	228	0.0089	0.9911	6.12	
116.5	25,067	587	0.0234	0.9766	6.07	
117.5	23,541	1,262	0.0536	0.9464	5.93	
118.5	21,797	756	0.0347	0.9653	5.61	

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 380.3 AND 380.45 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1878-2011			EXPERIENCE BAND 1939-2011		
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	20,100	391	0.0195	0.9805	5.41
120.5	19,442	683	0.0351	0.9649	5.31
121.5	14,820	1,682	0.1135	0.8865	5.12
122.5	12,239	103	0.0084	0.9916	4.54
123.5	11,299	242	0.0215	0.9785	4.50
124.5	4,994		0.0000	1.0000	4.41
125.5	4,013		0.0000	1.0000	4.41
126.5	1,735		0.0000	1.0000	4.41
127.5	1,511		0.0000	1.0000	4.41
128.5	135		0.0000	1.0000	4.41
129.5	135		0.0000	1.0000	4.41
130.5	129		0.0000	1.0000	4.41
131.5	14		0.0000	1.0000	4.41
132.5	11		0.0000	1.0000	4.41
133.5					4.41

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 380.3 AND 380.45 SERVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1878-2011

EXPERIENCE BAND 1970-2011

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	313,351,063	1,093,188	0.0035	0.9965	100.00
0.5	289,319,097	1,780,936	0.0062	0.9938	99.65
1.5	271,986,518	1,411,101	0.0052	0.9948	99.04
2.5	256,570,878	1,834,770	0.0072	0.9928	98.52
3.5	239,790,730	1,653,504	0.0069	0.9931	97.82
4.5	225,387,242	1,588,453	0.0070	0.9930	97.14
5.5	214,932,208	1,606,445	0.0075	0.9925	96.46
6.5	204,159,796	1,476,309	0.0072	0.9928	95.74
7.5	194,353,309	1,440,607	0.0074	0.9926	95.05
8.5	187,203,310	1,515,157	0.0081	0.9919	94.34
9.5	179,641,455	1,570,279	0.0087	0.9913	93.58
10.5	171,296,556	1,413,142	0.0082	0.9918	92.76
11.5	162,374,899	1,444,147	0.0089	0.9911	92.00
12.5	153,471,093	1,521,678	0.0099	0.9901	91.18
13.5	144,857,887	1,382,199	0.0095	0.9905	90.27
14.5	136,721,211	1,335,210	0.0098	0.9902	89.41
15.5	128,904,734	1,331,816	0.0103	0.9897	88.54
16.5	120,479,354	1,171,198	0.0097	0.9903	87.62
17.5	111,912,914	1,336,875	0.0119	0.9881	86.77
18.5	104,341,482	1,260,441	0.0121	0.9879	85.74
19.5	97,117,836	1,211,279	0.0125	0.9875	84.70
20.5	90,546,289	1,200,149	0.0133	0.9867	83.64
21.5	83,503,756	1,027,603	0.0123	0.9877	82.53
22.5	76,899,450	1,088,128	0.0142	0.9858	81.52
23.5	69,933,856	1,354,843	0.0194	0.9806	80.37
24.5	63,606,880	1,497,145	0.0235	0.9765	78.81
25.5	57,781,716	1,392,476	0.0241	0.9759	76.95
26.5	52,478,614	1,229,943	0.0234	0.9766	75.10
27.5	47,723,293	1,184,711	0.0248	0.9752	73.34
28.5	43,512,768	1,007,178	0.0231	0.9769	71.52
29.5	39,220,362	854,215	0.0218	0.9782	69.86
30.5	34,494,621	770,233	0.0223	0.9777	68.34
31.5	29,827,593	674,158	0.0226	0.9774	66.82
32.5	26,444,351	681,284	0.0258	0.9742	65.31
33.5	23,721,537	563,413	0.0238	0.9762	63.62
34.5	20,160,886	493,935	0.0245	0.9755	62.11
35.5	18,377,744	419,470	0.0228	0.9772	60.59
36.5	17,250,852	356,278	0.0207	0.9793	59.21
37.5	16,595,988	277,636	0.0167	0.9833	57.98
38.5	15,756,838	258,330	0.0164	0.9836	57.01

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 380.3 AND 380.45 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1878-2011			EXPERIENCE BAND 1970-2011		
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	14,798,019	251,842	0.0170	0.9830	56.08
40.5	13,814,492	203,532	0.0147	0.9853	55.13
41.5	12,838,324	185,465	0.0144	0.9856	54.31
42.5	11,854,029	177,992	0.0150	0.9850	53.53
43.5	10,601,593	165,652	0.0156	0.9844	52.72
44.5	9,435,362	153,122	0.0162	0.9838	51.90
45.5	8,269,666	137,273	0.0166	0.9834	51.06
46.5	7,346,651	124,713	0.0170	0.9830	50.21
47.5	6,453,658	104,465	0.0162	0.9838	49.36
48.5	5,597,477	107,902	0.0193	0.9807	48.56
49.5	4,852,542	81,784	0.0169	0.9831	47.62
50.5	4,129,554	118,219	0.0286	0.9714	46.82
51.5	3,450,109	101,870	0.0295	0.9705	45.48
52.5	2,753,641	70,197	0.0255	0.9745	44.14
53.5	2,288,798	58,265	0.0255	0.9745	43.01
54.5	1,936,349	50,793	0.0262	0.9738	41.92
55.5	1,572,005	40,648	0.0259	0.9741	40.82
56.5	1,277,478	38,695	0.0303	0.9697	39.76
57.5	1,069,981	27,544	0.0257	0.9743	38.56
58.5	934,109	26,845	0.0287	0.9713	37.57
59.5	795,405	22,641	0.0285	0.9715	36.49
60.5	672,103	17,003	0.0253	0.9747	35.45
61.5	579,072	13,490	0.0233	0.9767	34.55
62.5	509,258	12,701	0.0249	0.9751	33.75
63.5	457,411	12,547	0.0274	0.9726	32.90
64.5	418,389	11,835	0.0283	0.9717	32.00
65.5	400,975	12,002	0.0299	0.9701	31.10
66.5	391,471	10,966	0.0280	0.9720	30.17
67.5	394,097	11,358	0.0288	0.9712	29.32
68.5	396,859	9,508	0.0240	0.9760	28.48
69.5	390,135	11,521	0.0295	0.9705	27.79
70.5	366,810	9,974	0.0272	0.9728	26.97
71.5	347,217	9,736	0.0280	0.9720	26.24
72.5	322,745	10,640	0.0330	0.9670	25.50
73.5	303,657	9,601	0.0316	0.9684	24.66
74.5	289,171	9,386	0.0325	0.9675	23.88
75.5	279,932	9,910	0.0354	0.9646	23.11
76.5	268,550	9,066	0.0338	0.9662	22.29
77.5	260,522	9,562	0.0367	0.9633	21.54
78.5	248,734	9,335	0.0375	0.9625	20.75

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 380.3 AND 380.45 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1878-2011			EXPERIENCE BAND 1970-2011		
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	253,597	9,887	0.0390	0.9610	19.97
80.5	243,679	9,505	0.0390	0.9610	19.19
81.5	231,786	10,174	0.0439	0.9561	18.44
82.5	231,935	8,208	0.0354	0.9646	17.63
83.5	220,088	8,257	0.0375	0.9625	17.01
84.5	214,926	8,783	0.0409	0.9591	16.37
85.5	197,707	7,697	0.0389	0.9611	15.70
86.5	185,926	8,085	0.0435	0.9565	15.09
87.5	172,266	7,206	0.0418	0.9582	14.43
88.5	159,337	5,505	0.0345	0.9655	13.83
89.5	151,428	5,412	0.0357	0.9643	13.35
90.5	144,705	5,879	0.0406	0.9594	12.87
91.5	137,000	4,297	0.0314	0.9686	12.35
92.5	130,772	3,974	0.0304	0.9696	11.96
93.5	125,724	3,494	0.0278	0.9722	11.60
94.5	120,902	3,610	0.0299	0.9701	11.28
95.5	115,242	3,546	0.0308	0.9692	10.94
96.5	108,650	3,240	0.0298	0.9702	10.60
97.5	102,996	3,320	0.0322	0.9678	10.29
98.5	97,255	2,737	0.0281	0.9719	9.96
99.5	92,612	2,552	0.0276	0.9724	9.68
100.5	87,960	2,852	0.0324	0.9676	9.41
101.5	82,282	2,670	0.0324	0.9676	9.10
102.5	77,130	4,321	0.0560	0.9440	8.81
103.5	69,411	4,266	0.0615	0.9385	8.32
104.5	62,316	3,764	0.0604	0.9396	7.80
105.5	56,621	1,439	0.0254	0.9746	7.33
106.5	53,100	1,361	0.0256	0.9744	7.15
107.5	49,070	1,068	0.0218	0.9782	6.96
108.5	46,034	594	0.0129	0.9871	6.81
109.5	41,624	738	0.0177	0.9823	6.72
110.5	39,725	358	0.0090	0.9910	6.61
111.5	33,582	436	0.0130	0.9870	6.55
112.5	31,404	1,008	0.0321	0.9679	6.46
113.5	28,581	845	0.0296	0.9704	6.25
114.5	27,291	1,079	0.0395	0.9605	6.07
115.5	25,663	228	0.0089	0.9911	5.83
116.5	25,067	587	0.0234	0.9766	5.78
117.5	23,541	1,262	0.0536	0.9464	5.64
118.5	21,797	756	0.0347	0.9653	5.34

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 380.3 AND 380.45 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1878-2011			EXPERIENCE BAND 1970-2011		
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	20,100	391	0.0195	0.9805	5.15
120.5	19,442	683	0.0351	0.9649	5.05
121.5	14,820	1,682	0.1135	0.8865	4.88
122.5	12,239	103	0.0084	0.9916	4.32
123.5	11,299	242	0.0215	0.9785	4.29
124.5	4,994		0.0000	1.0000	4.19
125.5	4,013		0.0000	1.0000	4.19
126.5	1,735		0.0000	1.0000	4.19
127.5	1,511		0.0000	1.0000	4.19
128.5	135		0.0000	1.0000	4.19
129.5	135		0.0000	1.0000	4.19
130.5	129		0.0000	1.0000	4.19
131.5	14		0.0000	1.0000	4.19
132.5	11		0.0000	1.0000	4.19
133.5					4.19

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 380.3 AND 380.45 SERVICES  
ORIGINAL LIFE TABLE

PLACEMENT BAND 1878-2011			EXPERIENCE BAND 1992-2011		
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	221,944,482	1,086,755	0.0049	0.9951	100.00
0.5	202,816,064	927,584	0.0046	0.9954	99.51
1.5	191,634,596	894,992	0.0047	0.9953	99.06
2.5	181,916,646	1,270,630	0.0070	0.9930	98.59
3.5	171,134,439	1,144,296	0.0067	0.9933	97.90
4.5	161,674,390	1,111,389	0.0069	0.9931	97.25
5.5	155,404,294	1,130,691	0.0073	0.9927	96.58
6.5	148,503,157	1,012,740	0.0068	0.9932	95.88
7.5	142,571,085	1,001,739	0.0070	0.9930	95.22
8.5	138,634,072	1,077,098	0.0078	0.9922	94.56
9.5	134,679,177	1,133,498	0.0084	0.9916	93.82
10.5	130,532,527	1,016,821	0.0078	0.9922	93.03
11.5	126,195,496	1,016,467	0.0081	0.9919	92.31
12.5	120,513,092	1,112,846	0.0092	0.9908	91.56
13.5	114,091,340	1,002,905	0.0088	0.9912	90.72
14.5	109,342,517	946,748	0.0087	0.9913	89.92
15.5	103,124,353	961,334	0.0093	0.9907	89.14
16.5	95,936,099	847,136	0.0088	0.9912	88.31
17.5	88,422,483	998,025	0.0113	0.9887	87.53
18.5	81,947,792	933,689	0.0114	0.9886	86.54
19.5	76,217,975	870,624	0.0114	0.9886	85.56
20.5	71,301,191	890,102	0.0125	0.9875	84.58
21.5	65,736,663	744,110	0.0113	0.9887	83.52
22.5	60,598,659	813,918	0.0134	0.9866	82.58
23.5	55,223,901	934,807	0.0169	0.9831	81.47
24.5	50,553,870	1,040,973	0.0206	0.9794	80.09
25.5	46,392,987	992,217	0.0214	0.9786	78.44
26.5	42,457,103	856,656	0.0202	0.9798	76.76
27.5	39,044,782	919,676	0.0236	0.9764	75.21
28.5	35,973,863	730,546	0.0203	0.9797	73.44
29.5	32,702,506	604,202	0.0185	0.9815	71.95
30.5	28,952,711	586,597	0.0203	0.9797	70.62
31.5	25,189,313	491,443	0.0195	0.9805	69.19
32.5	22,745,616	491,029	0.0216	0.9784	67.84
33.5	20,753,555	463,544	0.0223	0.9777	66.38
34.5	17,685,457	411,959	0.0233	0.9767	64.89
35.5	16,403,624	354,601	0.0216	0.9784	63.38
36.5	15,685,015	299,254	0.0191	0.9809	62.01
37.5	15,326,223	228,815	0.0149	0.9851	60.83
38.5	14,649,943	178,239	0.0122	0.9878	59.92



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 380.3 AND 380.45 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1878-2011			EXPERIENCE BAND 1992-2011		
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	13,881,195	173,728	0.0125	0.9875	59.19
40.5	13,059,313	154,785	0.0119	0.9881	58.45
41.5	12,201,548	146,550	0.0120	0.9880	57.76
42.5	11,283,617	130,667	0.0116	0.9884	57.06
43.5	10,096,437	143,118	0.0142	0.9858	56.40
44.5	8,969,619	139,356	0.0155	0.9845	55.60
45.5	7,821,500	123,146	0.0157	0.9843	54.74
46.5	6,903,849	110,936	0.0161	0.9839	53.88
47.5	6,023,015	89,576	0.0149	0.9851	53.01
48.5	5,185,835	93,464	0.0180	0.9820	52.22
49.5	4,469,878	67,716	0.0151	0.9849	51.28
50.5	3,780,661	106,491	0.0282	0.9718	50.51
51.5	3,134,041	91,659	0.0292	0.9708	49.08
52.5	2,466,586	59,263	0.0240	0.9760	47.65
53.5	2,020,282	48,952	0.0242	0.9758	46.50
54.5	1,677,086	41,864	0.0250	0.9750	45.38
55.5	1,318,841	31,222	0.0237	0.9763	44.24
56.5	1,029,294	30,013	0.0292	0.9708	43.20
57.5	828,610	17,863	0.0216	0.9784	41.94
58.5	701,086	15,596	0.0222	0.9778	41.03
59.5	567,779	12,941	0.0228	0.9772	40.12
60.5	450,751	8,822	0.0196	0.9804	39.21
61.5	363,037	5,767	0.0159	0.9841	38.44
62.5	306,221	5,580	0.0182	0.9818	37.83
63.5	271,563	6,011	0.0221	0.9779	37.14
64.5	244,088	4,867	0.0199	0.9801	36.32
65.5	236,209	5,677	0.0240	0.9760	35.59
66.5	237,713	5,331	0.0224	0.9776	34.74
67.5	233,862	5,722	0.0245	0.9755	33.96
68.5	228,596	3,289	0.0144	0.9856	33.13
69.5	211,462	3,774	0.0178	0.9822	32.65
70.5	189,741	2,406	0.0127	0.9873	32.07
71.5	172,258	2,277	0.0132	0.9868	31.66
72.5	153,993	2,294	0.0149	0.9851	31.24
73.5	141,542	1,866	0.0132	0.9868	30.78
74.5	134,382	2,077	0.0155	0.9845	30.37
75.5	129,824	2,371	0.0183	0.9817	29.90
76.5	128,367	2,887	0.0225	0.9775	29.36
77.5	125,520	2,696	0.0215	0.9785	28.70
78.5	122,344	3,190	0.0261	0.9739	28.08

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 380.3 AND 380.45 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1878-2011			EXPERIENCE BAND 1992-2011			
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	119,649	2,887	0.0241	0.9759	27.35	
80.5	115,759	3,331	0.0288	0.9712	26.69	
81.5	109,797	3,250	0.0296	0.9704	25.92	
82.5	100,211	2,894	0.0289	0.9711	25.15	
83.5	92,256	2,621	0.0284	0.9716	24.43	
84.5	84,138	2,489	0.0296	0.9704	23.73	
85.5	74,499	1,630	0.0219	0.9781	23.03	
86.5	65,608	1,442	0.0220	0.9780	22.53	
87.5	62,919	1,586	0.0252	0.9748	22.03	
88.5	58,793	1,402	0.0238	0.9762	21.48	
89.5	60,246	1,298	0.0216	0.9784	20.96	
90.5	64,058	1,348	0.0210	0.9790	20.51	
91.5	67,804	1,553	0.0229	0.9771	20.08	
92.5	66,877	1,266	0.0189	0.9811	19.62	
93.5	67,209	1,342	0.0200	0.9800	19.25	
94.5	66,200	1,122	0.0169	0.9831	18.86	
95.5	64,201	1,292	0.0201	0.9799	18.54	
96.5	60,946	1,290	0.0212	0.9788	18.17	
97.5	58,893	1,420	0.0241	0.9759	17.79	
98.5	55,597	1,051	0.0189	0.9811	17.36	
99.5	54,348	701	0.0129	0.9871	17.03	
100.5	52,228	830	0.0159	0.9841	16.81	
101.5	54,792	1,326	0.0242	0.9758	16.54	
102.5	52,265	2,660	0.0509	0.9491	16.14	
103.5	47,900	2,713	0.0566	0.9434	15.32	
104.5	50,642	3,012	0.0595	0.9405	14.45	
105.5	47,289	1,069	0.0226	0.9774	13.59	
106.5	49,871	1,110	0.0223	0.9777	13.29	
107.5	46,370	857	0.0185	0.9815	12.99	
108.5	45,792	575	0.0126	0.9874	12.75	
109.5	41,400	727	0.0176	0.9824	12.59	
110.5	39,519	358	0.0091	0.9909	12.37	
111.5	33,557	436	0.0130	0.9870	12.26	
112.5	31,383	1,004	0.0320	0.9680	12.10	
113.5	28,581	845	0.0296	0.9704	11.71	
114.5	27,291	1,079	0.0395	0.9605	11.36	
115.5	25,663	228	0.0089	0.9911	10.92	
116.5	25,067	587	0.0234	0.9766	10.82	
117.5	23,541	1,262	0.0536	0.9464	10.57	
118.5	21,797	756	0.0347	0.9653	10.00	

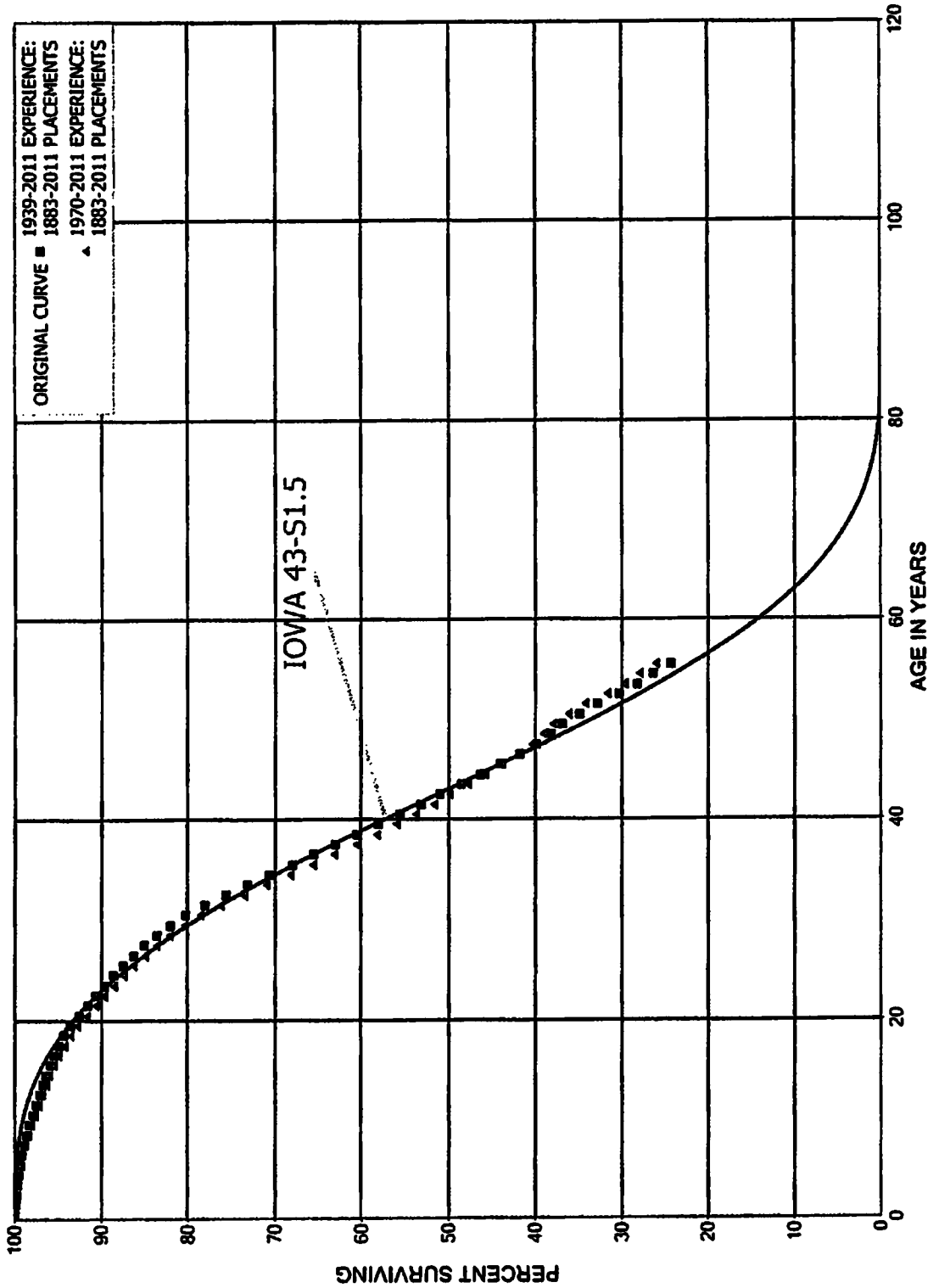
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 380.3 AND 380.45 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1878-2011			EXPERIENCE BAND 1992-2011			
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	20,100	391	0.0195	0.9805	9.65	
120.5	19,442	683	0.0351	0.9649	9.46	
121.5	14,820	1,682	0.1135	0.8865	9.13	
122.5	12,239	103	0.0084	0.9916	8.09	
123.5	11,299	242	0.0215	0.9785	8.03	
124.5	4,994		0.0000	1.0000	7.85	
125.5	4,013		0.0000	1.0000	7.85	
126.5	1,735		0.0000	1.0000	7.85	
127.5	1,511		0.0000	1.0000	7.85	
128.5	135		0.0000	1.0000	7.85	
129.5	135		0.0000	1.0000	7.85	
130.5	129		0.0000	1.0000	7.85	
131.5	14		0.0000	1.0000	7.85	
132.5	11		0.0000	1.0000	7.85	
133.5					7.85	

COLUMBIA GAS OF PENNSYLVANIA, INC.  
ACCOUNT 381 METERS  
ORIGINAL AND SMOOTH SURVIVOR CURVES



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1883-2011

EXPERIENCE BAND 1939-2011

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	53,759,081	7,175	0.0001	0.9999	100.00
0.5	42,979,471	65,499	0.0015	0.9985	99.99
1.5	40,588,456	60,641	0.0015	0.9985	99.83
2.5	38,560,465	25,813	0.0007	0.9993	99.69
3.5	36,951,268	45,497	0.0012	0.9988	99.62
4.5	35,773,989	65,913	0.0018	0.9982	99.50
5.5	35,175,665	65,144	0.0019	0.9981	99.31
6.5	34,412,590	102,583	0.0030	0.9970	99.13
7.5	32,960,614	80,769	0.0025	0.9975	98.83
8.5	31,997,251	112,041	0.0035	0.9965	98.59
9.5	30,790,381	115,195	0.0037	0.9963	98.25
10.5	29,950,941	119,237	0.0040	0.9960	97.88
11.5	29,533,599	119,309	0.0040	0.9960	97.49
12.5	28,289,041	98,338	0.0035	0.9965	97.09
13.5	27,171,571	106,320	0.0039	0.9961	96.76
14.5	26,327,938	134,943	0.0051	0.9949	96.38
15.5	24,507,926	123,045	0.0050	0.9950	95.88
16.5	24,464,144	134,557	0.0055	0.9945	95.40
17.5	23,989,570	156,182	0.0065	0.9935	94.88
18.5	22,932,436	193,214	0.0084	0.9916	94.26
19.5	21,904,108	229,473	0.0105	0.9895	93.47
20.5	21,136,340	212,991	0.0101	0.9899	92.49
21.5	20,388,692	211,133	0.0104	0.9896	91.56
22.5	19,311,607	206,683	0.0107	0.9893	90.61
23.5	18,392,434	213,610	0.0116	0.9884	89.64
24.5	17,518,537	212,963	0.0122	0.9878	88.60
25.5	16,652,340	228,810	0.0137	0.9863	87.52
26.5	15,836,889	228,932	0.0145	0.9855	86.32
27.5	15,114,649	264,228	0.0175	0.9825	85.07
28.5	14,522,695	268,703	0.0185	0.9815	83.58
29.5	13,781,317	302,018	0.0219	0.9781	82.04
30.5	12,761,992	345,900	0.0271	0.9729	80.24
31.5	11,763,374	366,258	0.0311	0.9689	78.06
32.5	11,091,055	354,258	0.0319	0.9681	75.63
33.5	10,530,570	375,224	0.0356	0.9644	73.22
34.5	9,966,391	369,930	0.0371	0.9629	70.61
35.5	9,492,451	347,905	0.0367	0.9633	67.99
36.5	8,912,063	345,759	0.0388	0.9612	65.50
37.5	8,382,243	328,075	0.0391	0.9609	62.95
38.5	7,913,267	320,436	0.0405	0.9595	60.49

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1883-2011			EXPERIENCE BAND 1939-2011		
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	7,334,179	311,784	0.0425	0.9575	58.04
40.5	6,703,420	294,477	0.0439	0.9561	55.57
41.5	6,184,239	252,711	0.0409	0.9591	53.13
42.5	5,663,199	268,975	0.0475	0.9525	50.96
43.5	5,167,294	245,179	0.0474	0.9526	48.54
44.5	4,593,866	222,249	0.0484	0.9516	46.24
45.5	4,007,198	203,955	0.0509	0.9491	44.00
46.5	3,482,650	156,284	0.0449	0.9551	41.76
47.5	3,094,815	128,827	0.0416	0.9584	39.89
48.5	2,799,424	104,723	0.0374	0.9626	38.23
49.5	2,458,133	129,448	0.0527	0.9473	36.80
50.5	2,068,417	121,249	0.0586	0.9414	34.86
51.5	1,670,702	130,517	0.0781	0.9219	32.82
52.5	1,343,472	92,138	0.0686	0.9314	30.25
53.5	1,066,343	72,385	0.0679	0.9321	28.18
54.5	782,488	60,354	0.0771	0.9229	26.26
55.5	666,343	47,019	0.0706	0.9294	24.24
56.5	550,887	39,403	0.0715	0.9285	22.53
57.5	458,746	36,773	0.0802	0.9198	20.92
58.5	402,521	32,332	0.0803	0.9197	19.24
59.5	336,386	29,399	0.0874	0.9126	17.69
60.5	251,715	29,058	0.1154	0.8846	16.15
61.5	193,717	23,183	0.1197	0.8803	14.28
62.5	153,147	20,896	0.1364	0.8636	12.57
63.5	116,263	18,574	0.1598	0.8402	10.86
64.5	95,487	10,503	0.1100	0.8900	9.12
65.5	80,900	10,310	0.1274	0.8726	8.12
66.5	69,921	6,579	0.0941	0.9059	7.09
67.5	63,228	5,521	0.0873	0.9127	6.42
68.5	55,526	3,566	0.0642	0.9358	5.86
69.5	48,837	4,736	0.0970	0.9030	5.48
70.5	40,204	1,287	0.0320	0.9680	4.95
71.5	38,916	244	0.0063	0.9937	4.79
72.5	38,268	411	0.0107	0.9893	4.76
73.5	37,635	312	0.0083	0.9917	4.71
74.5	37,250	895	0.0240	0.9760	4.67
75.5	35,908		0.0000	1.0000	4.56
76.5	35,883	194	0.0054	0.9946	4.56
77.5	35,566	870	0.0245	0.9755	4.53
78.5	34,696	203	0.0059	0.9941	4.42

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1883-2011			EXPERIENCE BAND 1939-2011			
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	34,492	108	0.0031	0.9969	4.40	
80.5	34,361	452	0.0132	0.9868	4.38	
81.5	33,541	783	0.0234	0.9766	4.33	
82.5	28,005	381	0.0136	0.9864	4.23	
83.5	22,090	269	0.0122	0.9878	4.17	
84.5	17,395		0.0000	1.0000	4.12	
85.5	13,872	92	0.0066	0.9934	4.12	
86.5	10,788	385	0.0357	0.9643	4.09	
87.5	8,550	400	0.0468	0.9532	3.94	
88.5	5,496	198	0.0361	0.9639	3.76	
89.5	3,700	117	0.0315	0.9685	3.62	
90.5	2,954	117	0.0395	0.9605	3.51	
91.5	1,617		0.0000	1.0000	3.37	
92.5	1,129		0.0000	1.0000	3.37	
93.5	408		0.0000	1.0000	3.37	
94.5	229		0.0000	1.0000	3.37	
95.5	169		0.0000	1.0000	3.37	
96.5	147		0.0000	1.0000	3.37	
97.5	130	72	0.5499	0.4501	3.37	
98.5	8		0.0000	1.0000	1.52	
99.5	8		0.0000	1.0000	1.52	
100.5	8	8	1.0000		1.52	
101.5						

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1883-2011			EXPERIENCE BAND 1970-2011		
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	43,884,687	2,339	0.0001	0.9999	100.00
0.5	33,914,404	63,046	0.0019	0.9981	99.99
1.5	32,076,172	59,588	0.0019	0.9981	99.81
2.5	30,663,659	24,256	0.0008	0.9992	99.62
3.5	29,636,593	44,409	0.0015	0.9985	99.54
4.5	28,965,842	63,672	0.0022	0.9978	99.40
5.5	28,859,973	64,142	0.0022	0.9978	99.18
6.5	28,643,970	101,757	0.0036	0.9964	98.96
7.5	27,642,313	79,116	0.0029	0.9971	98.60
8.5	27,058,357	110,984	0.0041	0.9959	98.32
9.5	26,177,259	113,286	0.0043	0.9957	97.92
10.5	25,625,515	118,333	0.0046	0.9954	97.50
11.5	25,518,735	118,167	0.0046	0.9954	97.05
12.5	24,567,623	96,956	0.0039	0.9961	96.60
13.5	23,698,664	105,452	0.0044	0.9956	96.21
14.5	23,165,268	133,424	0.0058	0.9942	95.79
15.5	21,721,487	121,819	0.0056	0.9944	95.24
16.5	21,761,423	133,515	0.0061	0.9939	94.70
17.5	21,463,863	154,303	0.0072	0.9928	94.12
18.5	20,585,648	192,048	0.0093	0.9907	93.44
19.5	19,786,800	227,483	0.0115	0.9885	92.57
20.5	19,201,019	211,287	0.0110	0.9890	91.51
21.5	18,560,448	209,044	0.0113	0.9887	90.50
22.5	17,533,604	203,991	0.0116	0.9884	89.48
23.5	16,627,155	210,074	0.0126	0.9874	88.44
24.5	15,743,926	208,185	0.0132	0.9868	87.32
25.5	14,873,819	222,194	0.0149	0.9851	86.17
26.5	14,065,010	221,503	0.0157	0.9843	84.88
27.5	13,380,674	254,911	0.0191	0.9809	83.54
28.5	12,844,985	258,386	0.0201	0.9799	81.95
29.5	12,146,965	290,917	0.0239	0.9761	80.30
30.5	11,188,461	334,181	0.0299	0.9701	78.38
31.5	10,230,294	352,093	0.0344	0.9656	76.04
32.5	9,618,042	340,246	0.0354	0.9646	73.42
33.5	9,059,451	353,484	0.0390	0.9610	70.83
34.5	8,503,337	337,916	0.0397	0.9603	68.06
35.5	8,042,146	302,627	0.0376	0.9624	65.36
36.5	7,483,249	292,300	0.0391	0.9609	62.90
37.5	6,994,789	270,000	0.0386	0.9614	60.44
38.5	6,586,043	254,576	0.0387	0.9613	58.11



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1883-2011			EXPERIENCE BAND 1970-2011		
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	6,077,127	241,028	0.0397	0.9603	55.86
40.5	5,584,110	220,419	0.0395	0.9605	53.65
41.5	5,162,230	180,911	0.0350	0.9650	51.53
42.5	4,750,170	202,766	0.0427	0.9573	49.72
43.5	4,348,330	183,838	0.0423	0.9577	47.60
44.5	3,846,225	162,228	0.0422	0.9578	45.59
45.5	3,338,957	149,495	0.0448	0.9552	43.66
46.5	2,896,587	107,962	0.0373	0.9627	41.71
47.5	2,592,851	85,973	0.0332	0.9668	40.16
48.5	2,363,896	67,782	0.0287	0.9713	38.82
49.5	2,111,314	99,965	0.0473	0.9527	37.71
50.5	1,780,822	93,950	0.0528	0.9472	35.93
51.5	1,436,031	108,086	0.0753	0.9247	34.03
52.5	1,141,703	69,966	0.0613	0.9387	31.47
53.5	890,852	53,438	0.0600	0.9400	29.54
54.5	628,128	43,752	0.0697	0.9303	27.77
55.5	529,402	28,228	0.0533	0.9467	25.83
56.5	433,259	23,655	0.0546	0.9454	24.46
57.5	355,422	20,485	0.0576	0.9424	23.12
58.5	315,079	16,720	0.0531	0.9469	21.79
59.5	262,917	17,222	0.0655	0.9345	20.63
60.5	190,441	15,564	0.0817	0.9183	19.28
61.5	145,830	10,535	0.0722	0.9278	17.71
62.5	117,847	12,728	0.1080	0.8920	16.43
63.5	89,140	8,138	0.0913	0.9087	14.65
64.5	78,787	5,090	0.0646	0.9354	13.31
65.5	69,610	3,552	0.0510	0.9490	12.45
66.5	65,380	3,950	0.0604	0.9396	11.82
67.5	61,327	4,627	0.0754	0.9246	11.10
68.5	54,519	3,231	0.0593	0.9407	10.27
69.5	48,116	4,096	0.0851	0.9149	9.66
70.5	40,183	1,278	0.0318	0.9682	8.84
71.5	38,905	244	0.0063	0.9937	8.56
72.5	38,256	411	0.0107	0.9893	8.50
73.5	37,627	312	0.0083	0.9917	8.41
74.5	37,242	895	0.0240	0.9760	8.34
75.5	35,901		0.0000	1.0000	8.14
76.5	35,875	194	0.0054	0.9946	8.14
77.5	35,558	870	0.0245	0.9755	8.10
78.5	34,688	203	0.0059	0.9941	7.90

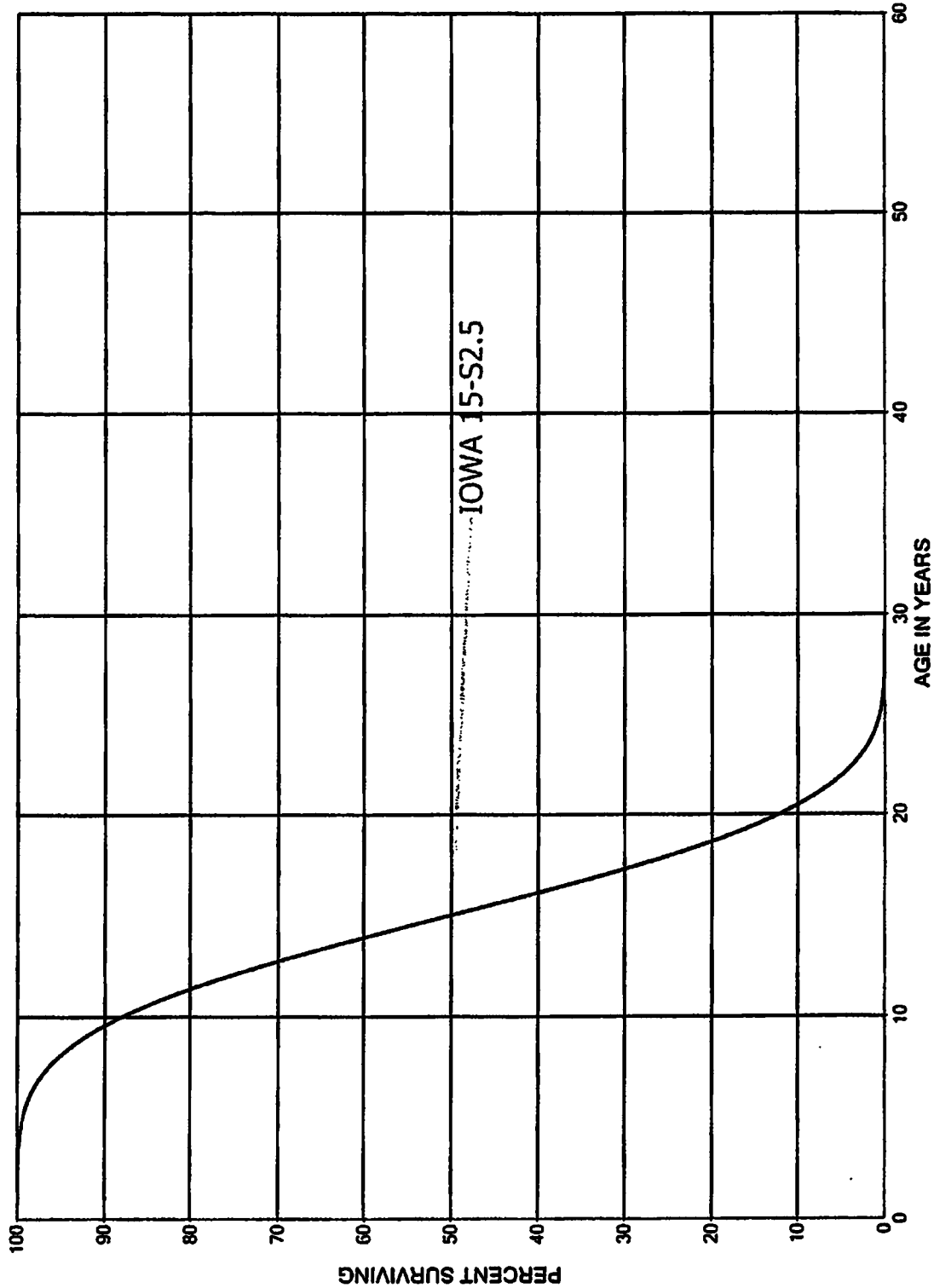
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

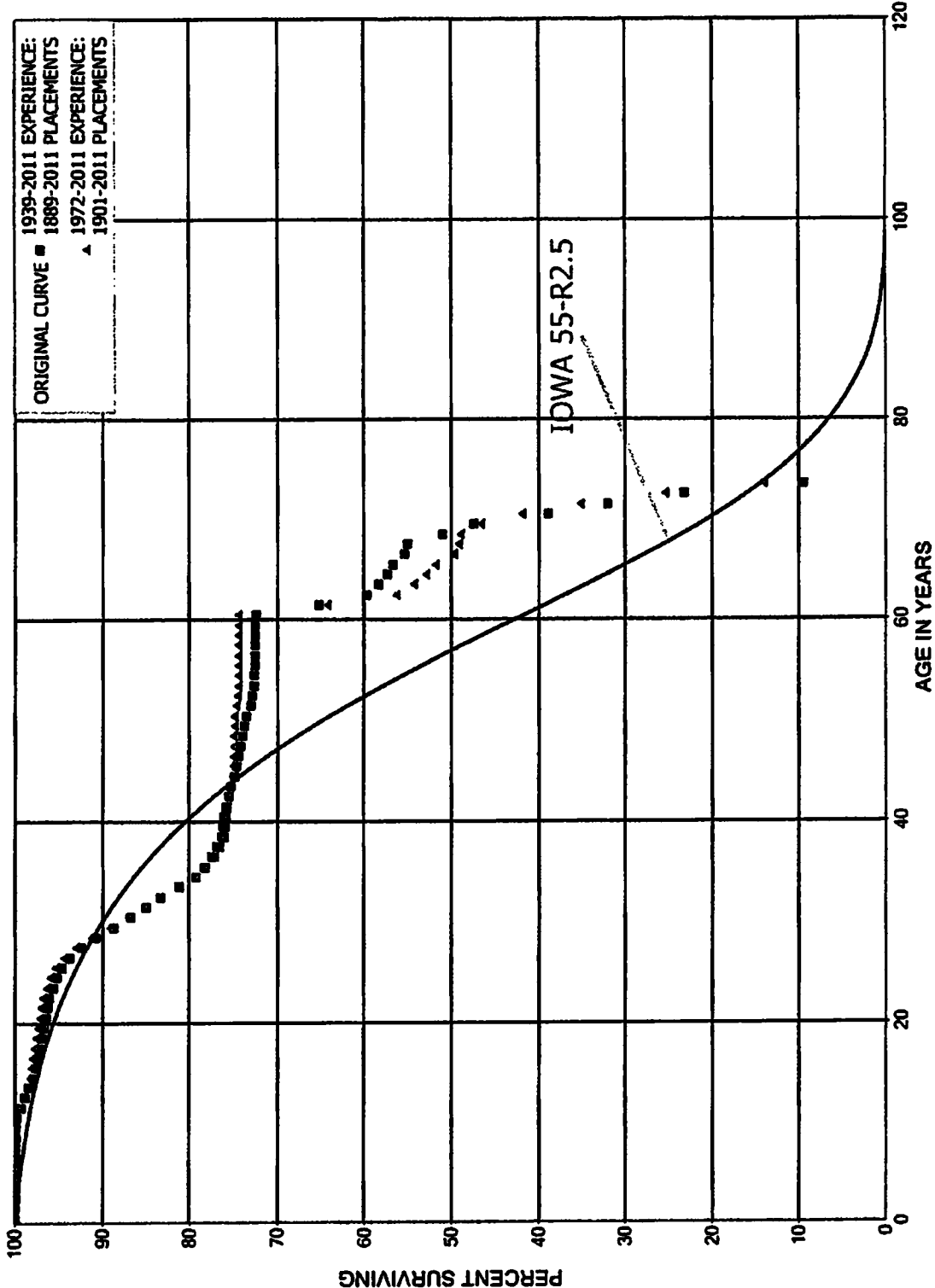
ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1883-2011			EXPERIENCE BAND 1970-2011			
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	34,484	108	0.0031	0.9969	7.85	
80.5	34,353	452	0.0132	0.9868	7.83	
81.5	33,533	783	0.0234	0.9766	7.72	
82.5	27,997	381	0.0136	0.9864	7.54	
83.5	22,083	269	0.0122	0.9878	7.44	
84.5	17,388		0.0000	1.0000	7.35	
85.5	13,865	92	0.0066	0.9934	7.35	
86.5	10,788	385	0.0357	0.9643	7.30	
87.5	8,550	400	0.0468	0.9532	7.04	
88.5	5,496	198	0.0361	0.9639	6.71	
89.5	3,700	117	0.0315	0.9685	6.47	
90.5	2,954	117	0.0395	0.9605	6.27	
91.5	1,617		0.0000	1.0000	6.02	
92.5	1,129		0.0000	1.0000	6.02	
93.5	408		0.0000	1.0000	6.02	
94.5	229		0.0000	1.0000	6.02	
95.5	169		0.0000	1.0000	6.02	
96.5	147		0.0000	1.0000	6.02	
97.5	130	72	0.5499	0.4501	6.02	
98.5	8		0.0000	1.0000	2.71	
99.5	8		0.0000	1.0000	2.71	
100.5	8	8	1.0000		2.71	
101.5						

COLUMBIA GAS OF PENNSYLVANIA, INC.  
ACCOUNT 381.1 METERS - AMR  
SMOOTH SURVIVOR CURVE



COLUMBIA GAS OF PENNSYLVANIA, INC.  
ACCOUNT 382 METER INSTALLATIONS  
ORIGINAL AND SMOOTH SURVIVOR CURVES



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 382 METER INSTALLATIONS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1889-2011			EXPERIENCE BAND 1939-2011		
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	31,313,940	166	0.0000	1.0000	100.00
0.5	29,816,955	10,691	0.0004	0.9996	100.00
1.5	28,399,024	23,903	0.0008	0.9992	99.96
2.5	26,560,723	3,935	0.0001	0.9999	99.88
3.5	25,176,716	3,137	0.0001	0.9999	99.86
4.5	22,253,464	1,909	0.0001	0.9999	99.85
5.5	22,059,498	2,366	0.0001	0.9999	99.84
6.5	21,303,366	796	0.0000	1.0000	99.83
7.5	20,251,102	3,795	0.0002	0.9998	99.83
8.5	19,178,141	3,097	0.0002	0.9998	99.81
9.5	18,169,288	5,902	0.0003	0.9997	99.79
10.5	17,149,273	81,585	0.0048	0.9952	99.76
11.5	15,949,566	77,847	0.0049	0.9951	99.29
12.5	15,380,950	66,304	0.0043	0.9957	98.80
13.5	14,724,139	89,239	0.0061	0.9939	98.38
14.5	13,937,182	28,659	0.0021	0.9979	97.78
15.5	13,178,421	19,970	0.0015	0.9985	97.58
16.5	12,512,427	28,862	0.0023	0.9977	97.43
17.5	11,744,267	50,027	0.0043	0.9957	97.21
18.5	11,060,616	19,916	0.0018	0.9982	96.79
19.5	10,279,384	21,166	0.0021	0.9979	96.62
20.5	9,556,062	19,575	0.0020	0.9980	96.42
21.5	8,753,347	15,585	0.0018	0.9982	96.22
22.5	7,963,979	34,108	0.0043	0.9957	96.05
23.5	7,244,081	33,378	0.0046	0.9954	95.64
24.5	6,599,177	38,827	0.0059	0.9941	95.20
25.5	6,018,382	61,134	0.0102	0.9898	94.64
26.5	5,472,737	77,791	0.0142	0.9858	93.68
27.5	4,931,589	89,293	0.0181	0.9819	92.35
28.5	4,452,337	94,869	0.0213	0.9787	90.67
29.5	4,029,342	90,433	0.0224	0.9776	88.74
30.5	3,492,578	72,291	0.0207	0.9793	86.75
31.5	3,036,567	60,177	0.0198	0.9802	84.95
32.5	2,801,135	71,191	0.0254	0.9746	83.27
33.5	2,673,674	60,715	0.0227	0.9773	81.15
34.5	2,553,981	32,877	0.0129	0.9871	79.31
35.5	2,469,689	29,373	0.0119	0.9881	78.29
36.5	2,422,042	16,430	0.0068	0.9932	77.36
37.5	2,398,267	16,981	0.0071	0.9929	76.83
38.5	2,317,871	3,005	0.0013	0.9987	76.29

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 382 METER INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1889-2011			EXPERIENCE BAND 1939-2011		
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	2,238,240	4,798	0.0021	0.9979	76.19
40.5	2,108,575	5,550	0.0026	0.9974	76.03
41.5	1,956,814	7,494	0.0038	0.9962	75.83
42.5	1,788,852	7,024	0.0039	0.9961	75.54
43.5	1,611,854	8,965	0.0056	0.9944	75.24
44.5	1,472,157	3,879	0.0026	0.9974	74.82
45.5	1,325,505	4,320	0.0033	0.9967	74.63
46.5	1,199,060	3,652	0.0030	0.9970	74.38
47.5	1,077,665	2,716	0.0025	0.9975	74.16
48.5	1,009,314	3,151	0.0031	0.9969	73.97
49.5	944,472	3,331	0.0035	0.9965	73.74
50.5	898,032	5,988	0.0067	0.9933	73.48
51.5	842,207	2,065	0.0025	0.9975	72.99
52.5	771,720	1,903	0.0025	0.9975	72.81
53.5	711,305	578	0.0008	0.9992	72.63
54.5	666,768	268	0.0004	0.9996	72.57
55.5	618,662	274	0.0004	0.9996	72.54
56.5	573,079	99	0.0002	0.9998	72.51
57.5	536,909	59	0.0001	0.9999	72.50
58.5	498,324	120	0.0002	0.9998	72.49
59.5	465,961	422	0.0009	0.9991	72.47
60.5	434,576	43,389	0.0998	0.9002	72.41
61.5	355,652	29,739	0.0836	0.9164	65.18
62.5	295,329	6,412	0.0217	0.9783	59.73
63.5	265,204	4,513	0.0170	0.9830	58.43
64.5	242,015	2,952	0.0122	0.9878	57.44
65.5	226,244	5,148	0.0228	0.9772	56.74
66.5	215,795	1,397	0.0065	0.9935	55.44
67.5	210,400	15,733	0.0748	0.9252	55.09
68.5	190,704	13,356	0.0700	0.9300	50.97
69.5	168,580	30,526	0.1811	0.8189	47.40
70.5	126,329	22,164	0.1754	0.8246	38.81
71.5	95,913	26,463	0.2759	0.7241	32.00
72.5	60,001	35,712	0.5952	0.4048	23.17
73.5	11,438	884	0.0772	0.9228	9.38
74.5	3,507	2,492	0.7104	0.2896	8.66
75.5	905	905	1.0000		2.51
76.5					

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 382 METER INSTALLATIONS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1901-2011			EXPERIENCE BAND 1972-2011		
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	29,198,096	166	0.0000	1.0000	100.00
0.5	27,777,654	7,622	0.0003	0.9997	100.00
1.5	26,466,201	23,802	0.0009	0.9991	99.97
2.5	24,749,051	3,584	0.0001	0.9999	99.88
3.5	23,491,394	2,760	0.0001	0.9999	99.87
4.5	20,704,932	1,717	0.0001	0.9999	99.86
5.5	20,675,946	2,080	0.0001	0.9999	99.85
6.5	20,104,304	754	0.0000	1.0000	99.84
7.5	19,184,936	3,737	0.0002	0.9998	99.83
8.5	18,179,334	3,060	0.0002	0.9998	99.81
9.5	17,220,477	5,843	0.0003	0.9997	99.80
10.5	16,239,162	81,114	0.0050	0.9950	99.76
11.5	15,093,628	77,718	0.0051	0.9949	99.27
12.5	14,597,719	50,486	0.0035	0.9965	98.75
13.5	14,014,431	53,444	0.0038	0.9962	98.41
14.5	13,308,262	17,277	0.0013	0.9987	98.04
15.5	12,600,557	14,572	0.0012	0.9988	97.91
16.5	11,985,206	19,343	0.0016	0.9984	97.80
17.5	11,262,880	34,052	0.0030	0.9970	97.64
18.5	10,631,953	15,502	0.0015	0.9985	97.34
19.5	9,888,422	20,511	0.0021	0.9979	97.20
20.5	9,198,703	18,208	0.0020	0.9980	97.00
21.5	8,439,981	15,219	0.0018	0.9982	96.81
22.5	7,680,532	33,101	0.0043	0.9957	96.63
23.5	6,984,723	33,108	0.0047	0.9953	96.22
24.5	6,357,118	38,528	0.0061	0.9939	95.76
25.5	5,786,713	61,075	0.0106	0.9894	95.18
26.5	5,241,538	77,306	0.0147	0.9853	94.18
27.5	4,699,283	88,397	0.0188	0.9812	92.79
28.5	4,217,239	94,395	0.0224	0.9776	91.04
29.5	3,773,240	90,138	0.0239	0.9761	89.00
30.5	3,245,453	70,142	0.0216	0.9784	86.88
31.5	2,799,532	56,038	0.0200	0.9800	85.00
32.5	2,595,143	71,009	0.0274	0.9726	83.30
33.5	2,478,211	60,648	0.0245	0.9755	81.02
34.5	2,359,483	32,810	0.0139	0.9861	79.04
35.5	2,276,455	29,188	0.0128	0.9872	77.94
36.5	2,221,642	16,330	0.0074	0.9926	76.94
37.5	2,194,149	16,734	0.0076	0.9924	76.37
38.5	2,106,697	2,557	0.0012	0.9988	75.79

COLUMBIA GAS OF PENNSYLVANIA, INC.

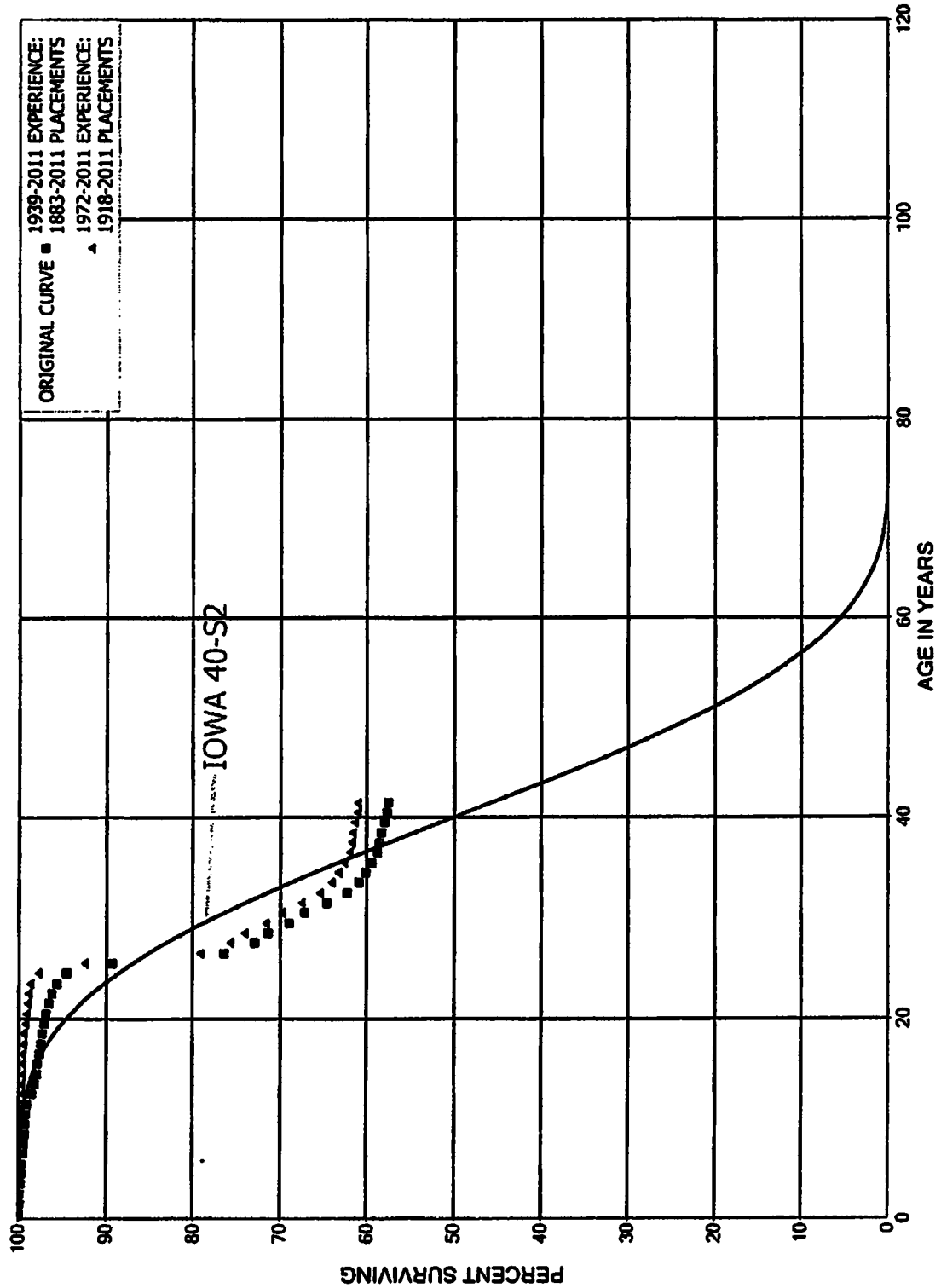
ACCOUNT 382 METER INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1901-2011			EXPERIENCE BAND 1972-2011			
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	2,025,622	3,474	0.0017	0.9983	75.70	
40.5	1,898,146	2,908	0.0015	0.9985	75.57	
41.5	1,756,310	3,455	0.0020	0.9980	75.45	
42.5	1,605,828	3,174	0.0020	0.9980	75.30	
43.5	1,443,474	4,870	0.0034	0.9966	75.16	
44.5	1,310,480	391	0.0003	0.9997	74.90	
45.5	1,173,768	601	0.0005	0.9995	74.88	
46.5	1,023,844	210	0.0002	0.9998	74.84	
47.5	910,365	43	0.0000	1.0000	74.83	
48.5	847,349	521	0.0006	0.9994	74.82	
49.5	787,597	461	0.0006	0.9994	74.78	
50.5	744,902	2,158	0.0029	0.9971	74.73	
51.5	693,430	909	0.0013	0.9987	74.52	
52.5	624,172	679	0.0011	0.9989	74.42	
53.5	564,963	9	0.0000	1.0000	74.34	
54.5	522,644		0.0000	1.0000	74.34	
55.5	478,141		0.0000	1.0000	74.34	
56.5	437,398		0.0000	1.0000	74.34	
57.5	405,856		0.0000	1.0000	74.34	
58.5	371,269		0.0000	1.0000	74.34	
59.5	342,532	335	0.0010	0.9990	74.34	
60.5	314,546	43,315	0.1377	0.8623	74.26	
61.5	239,956	29,647	0.1236	0.8764	64.04	
62.5	183,834	6,275	0.0341	0.9659	56.13	
63.5	159,690	4,509	0.0282	0.9718	54.21	
64.5	141,307	2,913	0.0206	0.9794	52.68	
65.5	129,578	5,120	0.0395	0.9605	51.59	
66.5	123,492	1,372	0.0111	0.9889	49.55	
67.5	124,193	771	0.0062	0.9938	49.00	
68.5	124,012	5,774	0.0466	0.9534	48.70	
69.5	120,201	12,169	0.1012	0.8988	46.43	
70.5	98,170	15,845	0.1614	0.8386	41.73	
71.5	74,074	20,903	0.2822	0.7178	35.00	
72.5	43,722	19,668	0.4498	0.5502	25.12	
73.5	11,333	778	0.0687	0.9313	13.82	
74.5	3,507	2,492	0.7104	0.2896	12.87	
75.5	905	905	1.0000		3.73	
76.5						



COLUMBIA GAS OF PENNSYLVANIA, INC.  
 ACCOUNT 383 HOUSE REGULATORS  
 ORIGINAL AND SMOOTH SURVIVOR CURVES



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 383 HOUSE REGULATORS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1883-2011			EXPERIENCE BAND 1939-2011			
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	8,806,403	1,022	0.0001	0.9999	100.00	
0.5	8,132,825	12,784	0.0016	0.9984	99.99	
1.5	7,509,553	3,031	0.0004	0.9996	99.83	
2.5	6,745,519	6,093	0.0009	0.9991	99.79	
3.5	6,202,308	3,422	0.0006	0.9994	99.70	
4.5	5,359,600	3,661	0.0007	0.9993	99.65	
5.5	4,941,958	2,584	0.0005	0.9995	99.58	
6.5	4,229,125	4,472	0.0011	0.9989	99.53	
7.5	3,329,575	3,265	0.0010	0.9990	99.42	
8.5	2,790,479	1,768	0.0006	0.9994	99.32	
9.5	2,420,073	1,514	0.0006	0.9994	99.26	
10.5	2,358,933	4,299	0.0018	0.9982	99.20	
11.5	2,183,053	10,705	0.0049	0.9951	99.02	
12.5	2,165,769	7,450	0.0034	0.9966	98.53	
13.5	2,134,111	4,556	0.0021	0.9979	98.19	
14.5	2,035,649	3,516	0.0017	0.9983	97.98	
15.5	1,953,967	3,371	0.0017	0.9983	97.81	
16.5	1,872,684	4,474	0.0024	0.9976	97.64	
17.5	1,798,744	2,612	0.0015	0.9985	97.41	
18.5	1,740,047	4,245	0.0024	0.9976	97.27	
19.5	1,654,906	3,446	0.0021	0.9979	97.03	
20.5	1,576,156	5,043	0.0032	0.9968	96.83	
21.5	1,481,580	5,655	0.0038	0.9962	96.52	
22.5	1,380,483	7,261	0.0053	0.9947	96.15	
23.5	1,283,061	14,846	0.0116	0.9884	95.65	
24.5	1,195,346	65,857	0.0551	0.9449	94.54	
25.5	1,061,366	152,907	0.1441	0.8559	89.33	
26.5	856,251	38,953	0.0455	0.9545	76.46	
27.5	766,768	17,169	0.0224	0.9776	72.98	
28.5	701,866	23,278	0.0332	0.9668	71.35	
29.5	634,071	16,521	0.0261	0.9739	68.98	
30.5	562,462	21,877	0.0389	0.9611	67.19	
31.5	496,014	17,507	0.0353	0.9647	64.57	
32.5	456,200	9,623	0.0211	0.9789	62.29	
33.5	438,418	5,468	0.0125	0.9875	60.98	
34.5	427,561	5,079	0.0119	0.9881	60.22	
35.5	417,068	4,504	0.0108	0.9892	59.50	
36.5	410,059	1,735	0.0042	0.9958	58.86	
37.5	405,152	1,203	0.0030	0.9970	58.61	
38.5	382,767	2,464	0.0064	0.9936	58.44	

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 383 HOUSE REGULATORS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1883-2011			EXPERIENCE BAND 1939-2011		
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	354,992	2,020	0.0057	0.9943	58.06
40.5	309,329	425	0.0014	0.9986	57.73
41.5	257,900	462	0.0018	0.9982	57.65
42.5	209,713	350	0.0017	0.9983	57.55
43.5	157,200	502	0.0032	0.9968	57.45
44.5	117,753	572	0.0049	0.9951	57.27
45.5	66,276	267	0.0040	0.9960	56.99
46.5	45,897	1,161	0.0253	0.9747	56.76
47.5	29,281	198	0.0068	0.9932	55.33
48.5	18,759	152	0.0081	0.9919	54.95
49.5	11,327	60	0.0053	0.9947	54.51
50.5	10,382	352	0.0339	0.9661	54.22
51.5	9,613	348	0.0362	0.9638	52.38
52.5	10,497	758	0.0723	0.9277	50.48
53.5	9,176	318	0.0346	0.9654	46.83
54.5	8,607	315	0.0366	0.9634	45.21
55.5	8,318	213	0.0256	0.9744	43.56
56.5	7,671	164	0.0214	0.9786	42.44
57.5	7,507	301	0.0401	0.9599	41.53
58.5	7,207	197	0.0274	0.9726	39.87
59.5	7,009	197	0.0281	0.9719	38.78
60.5	6,782	61	0.0089	0.9911	37.69
61.5	6,707	239	0.0356	0.9644	37.35
62.5	6,390	292	0.0457	0.9543	36.02
63.5	5,989	396	0.0660	0.9340	34.37
64.5	5,593	259	0.0463	0.9537	32.10
65.5	5,334	276	0.0517	0.9483	30.62
66.5	5,059	170	0.0337	0.9663	29.03
67.5	4,888	1,074	0.2197	0.7803	28.06
68.5	3,814	376	0.0986	0.9014	21.89
69.5	3,438	84	0.0244	0.9756	19.73
70.5	3,354	588	0.1753	0.8247	19.25
71.5	2,766	41	0.0150	0.9850	15.88
72.5	2,623		0.0000	1.0000	15.64
73.5	2,623	460	0.1752	0.8248	15.64
74.5	2,164	194	0.0897	0.9103	12.90
75.5	1,946		0.0000	1.0000	11.74
76.5	1,946	770	0.3955	0.6045	11.74
77.5	1,176	465	0.3956	0.6044	7.10
78.5	696	48	0.0690	0.9310	4.29

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 383 HOUSE REGULATORS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1883-2011			EXPERIENCE BAND 1939-2011			
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	648	135	0.2085	0.7915	3.99	
80.5	513	75	0.1460	0.8540	3.16	
81.5	438	121	0.2753	0.7247	2.70	
82.5	317	61	0.1926	0.8074	1.96	
83.5	256	130	0.5075	0.4925	1.58	
84.5	126	13	0.1031	0.8969	0.78	
85.5	113		0.0000	1.0000	0.70	
86.5	113		0.0000	1.0000	0.70	
87.5	113		0.0000	1.0000	0.70	
88.5	113		0.0000	1.0000	0.70	
89.5	113		0.0000	1.0000	0.70	
90.5	113		0.0000	1.0000	0.70	
91.5	113		0.0000	1.0000	0.70	
92.5	113		0.0000	1.0000	0.70	
93.5					0.70	

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 383 HOUSE REGULATORS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1918-2011			EXPERIENCE BAND 1972-2011			
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	8,258,677	20	0.0000	1.0000	100.00	
0.5	7,597,321		0.0000	1.0000	100.00	
1.5	7,024,399		0.0000	1.0000	100.00	
2.5	6,285,564	2,322	0.0004	0.9996	100.00	
3.5	5,780,815	682	0.0001	0.9999	99.96	
4.5	4,962,094	587	0.0001	0.9999	99.95	
5.5	4,595,693		0.0000	1.0000	99.94	
6.5	3,921,252	148	0.0000	1.0000	99.94	
7.5	3,070,902	958	0.0003	0.9997	99.94	
8.5	2,555,263	12	0.0000	1.0000	99.90	
9.5	2,208,270		0.0000	1.0000	99.90	
10.5	2,160,898	1,209	0.0006	0.9994	99.90	
11.5	2,006,489	6,021	0.0030	0.9970	99.85	
12.5	2,003,520	1,395	0.0007	0.9993	99.55	
13.5	1,985,479	756	0.0004	0.9996	99.48	
14.5	1,906,212	730	0.0004	0.9996	99.44	
15.5	1,841,907	1,101	0.0006	0.9994	99.40	
16.5	1,779,853	688	0.0004	0.9996	99.34	
17.5	1,718,203	768	0.0004	0.9996	99.31	
18.5	1,671,300	2,620	0.0016	0.9984	99.26	
19.5	1,593,411	2,333	0.0015	0.9985	99.11	
20.5	1,524,743	1,533	0.0010	0.9990	98.96	
21.5	1,444,130	1,224	0.0008	0.9992	98.86	
22.5	1,354,048	3,551	0.0026	0.9974	98.78	
23.5	1,260,751	11,877	0.0094	0.9906	98.52	
24.5	1,178,357	63,677	0.0540	0.9460	97.59	
25.5	1,047,469	150,038	0.1432	0.8568	92.32	
26.5	844,936	37,581	0.0445	0.9555	79.09	
27.5	755,733	16,459	0.0218	0.9782	75.57	
28.5	690,239	22,623	0.0328	0.9672	73.93	
29.5	617,615	15,988	0.0259	0.9741	71.51	
30.5	547,322	17,738	0.0324	0.9676	69.65	
31.5	485,935	15,092	0.0311	0.9689	67.40	
32.5	448,631	9,290	0.0207	0.9793	65.30	
33.5	430,946	5,018	0.0116	0.9884	63.95	
34.5	420,177	4,911	0.0117	0.9883	63.21	
35.5	409,623	4,184	0.0102	0.9898	62.47	
36.5	402,569	1,353	0.0034	0.9966	61.83	
37.5	398,085	563	0.0014	0.9986	61.62	
38.5	375,282	1,809	0.0048	0.9952	61.54	

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 383 HOUSE REGULATORS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1918-2011			EXPERIENCE BAND 1972-2011		
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	348,215	1,633	0.0047	0.9953	61.24
40.5	302,847	115	0.0004	0.9996	60.95
41.5	250,872	33	0.0001	0.9999	60.93
42.5	203,175	54	0.0003	0.9997	60.92
43.5	150,970	133	0.0009	0.9991	60.90
44.5	111,137	346	0.0031	0.9969	60.85
45.5	59,693	99	0.0017	0.9983	60.66
46.5	39,482	998	0.0253	0.9747	60.56
47.5	22,411	109	0.0048	0.9952	59.03
48.5	10,967	85	0.0077	0.9923	58.74
49.5	3,520		0.0000	1.0000	58.29
50.5	2,716	59	0.0218	0.9782	58.29
51.5	2,006	121	0.0605	0.9395	57.02
52.5	1,885	102	0.0540	0.9460	53.57
53.5	1,195		0.0000	1.0000	50.68
54.5	704	3	0.0042	0.9958	50.68
55.5	701		0.0000	1.0000	50.46
56.5	268		0.0000	1.0000	50.46
57.5	268		0.0000	1.0000	50.46
58.5	268		0.0000	1.0000	50.46
59.5	268		0.0000	1.0000	50.46
60.5	268		0.0000	1.0000	50.46
61.5	268		0.0000	1.0000	50.46
62.5	191		0.0000	1.0000	50.46
63.5	191		0.0000	1.0000	50.46
64.5	191		0.0000	1.0000	50.46
65.5	191		0.0000	1.0000	50.46
66.5	191		0.0000	1.0000	50.46
67.5	191		0.0000	1.0000	50.46
68.5	191		0.0000	1.0000	50.46
69.5	191		0.0000	1.0000	50.46
70.5	191		0.0000	1.0000	50.46
71.5	191		0.0000	1.0000	50.46
72.5	113		0.0000	1.0000	50.46
73.5	113		0.0000	1.0000	50.46
74.5	113		0.0000	1.0000	50.46
75.5	113		0.0000	1.0000	50.46
76.5	113		0.0000	1.0000	50.46
77.5	113		0.0000	1.0000	50.46
78.5	113		0.0000	1.0000	50.46

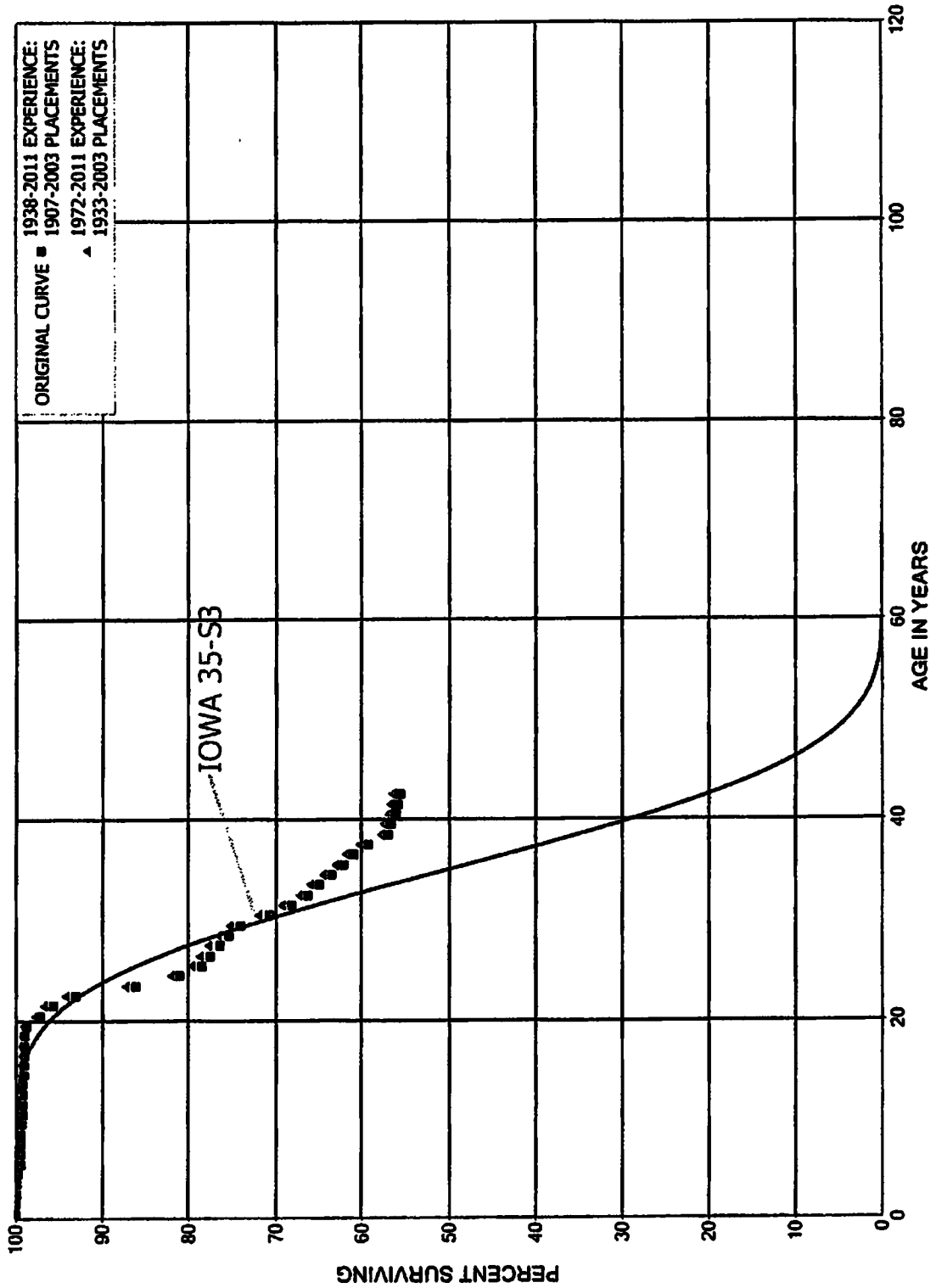
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 383 HOUSE REGULATORS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1918-2011			EXPERIENCE BAND 1972-2011		
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	113		0.0000	1.0000	50.46
80.5	113		0.0000	1.0000	50.46
81.5	113		0.0000	1.0000	50.46
82.5	113		0.0000	1.0000	50.46
83.5	113		0.0000	1.0000	50.46
84.5	113		0.0000	1.0000	50.46
85.5	113		0.0000	1.0000	50.46
86.5	113		0.0000	1.0000	50.46
87.5	113		0.0000	1.0000	50.46
88.5	113		0.0000	1.0000	50.46
89.5	113		0.0000	1.0000	50.46
90.5	113		0.0000	1.0000	50.46
91.5	113		0.0000	1.0000	50.46
92.5	113		0.0000	1.0000	50.46
93.5					50.46

COLUMBIA GAS OF PENNSYLVANIA, INC.  
 ACCOUNT 384 HOUSE REGULATOR INSTALLATIONS  
 ORIGINAL AND SMOOTH SURVIVOR CURVES





COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 384 HOUSE REGULATOR INSTALLATIONS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1907-2003			EXPERIENCE BAND 1938-2011		
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	4,344,773		0.0000	1.0000	100.00
0.5	4,368,017	2,508	0.0006	0.9994	100.00
1.5	4,390,246	5,106	0.0012	0.9988	99.94
2.5	4,400,207	1,502	0.0003	0.9997	99.83
3.5	4,418,659	3,619	0.0008	0.9992	99.79
4.5	4,433,565	11,910	0.0027	0.9973	99.71
5.5	4,432,749	469	0.0001	0.9999	99.44
6.5	4,440,652	361	0.0001	0.9999	99.43
7.5	4,446,734	364	0.0001	0.9999	99.42
8.5	4,321,092	3,404	0.0008	0.9992	99.42
9.5	4,173,824	5,081	0.0012	0.9988	99.34
10.5	3,949,137	769	0.0002	0.9998	99.22
11.5	3,764,696	1,097	0.0003	0.9997	99.20
12.5	3,636,700	1,603	0.0004	0.9996	99.17
13.5	3,463,571	1,072	0.0003	0.9997	99.12
14.5	3,283,371	520	0.0002	0.9998	99.09
15.5	3,170,869	2,611	0.0008	0.9992	99.08
16.5	3,025,443	291	0.0001	0.9999	99.00
17.5	2,846,211	2,372	0.0008	0.9992	98.99
18.5	2,736,958	5,858	0.0021	0.9979	98.90
19.5	2,601,550	40,823	0.0157	0.9843	98.69
20.5	2,429,261	37,362	0.0154	0.9846	97.14
21.5	2,251,284	60,820	0.0270	0.9730	95.65
22.5	2,046,261	151,015	0.0738	0.9262	93.07
23.5	1,721,980	102,760	0.0597	0.9403	86.20
24.5	1,458,305	45,327	0.0311	0.9689	81.05
25.5	1,287,865	17,415	0.0135	0.9865	78.53
26.5	1,154,136	16,156	0.0140	0.9860	77.47
27.5	1,038,390	13,902	0.0134	0.9866	76.39
28.5	934,073	16,265	0.0174	0.9826	75.37
29.5	813,253	36,168	0.0445	0.9555	74.05
30.5	674,113	24,428	0.0362	0.9638	70.76
31.5	571,453	16,086	0.0281	0.9719	68.20
32.5	513,618	10,544	0.0205	0.9795	66.28
33.5	501,770	10,598	0.0211	0.9789	64.92
34.5	491,172	11,068	0.0225	0.9775	63.54
35.5	466,516	8,986	0.0193	0.9807	62.11
36.5	431,813	11,272	0.0261	0.9739	60.92
37.5	404,633	16,101	0.0398	0.9602	59.33
38.5	347,270	2,411	0.0069	0.9931	56.97

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 384 HOUSE REGULATOR INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1907-2003			EXPERIENCE BAND 1938-2011			
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	314,239	3,000	0.0095	0.9905	56.57	
40.5	259,105	1,004	0.0039	0.9961	56.03	
41.5	203,233	904	0.0044	0.9956	55.81	
42.5	164,877	808	0.0049	0.9951	55.56	
43.5	137,585	758	0.0055	0.9945	55.29	
44.5	119,721	2,030	0.0170	0.9830	54.99	
45.5	104,386	1,485	0.0142	0.9858	54.06	
46.5	88,487	2,210	0.0250	0.9750	53.29	
47.5	73,197	138	0.0019	0.9981	51.96	
48.5	63,630	5	0.0001	0.9999	51.86	
49.5	57,289		0.0000	1.0000	51.85	
50.5	51,518		0.0000	1.0000	51.85	
51.5	44,631		0.0000	1.0000	51.85	
52.5	34,126	10	0.0003	0.9997	51.85	
53.5	25,131	2,768	0.1101	0.8899	51.84	
54.5	11,270	6,976	0.6190	0.3810	46.13	
55.5	196		0.0000	1.0000	17.58	
56.5	196		0.0000	1.0000	17.58	
57.5	199		0.0000	1.0000	17.58	
58.5	196		0.0000	1.0000	17.58	
59.5	196		0.0000	1.0000	17.58	
60.5	196		0.0000	1.0000	17.58	
61.5	196		0.0000	1.0000	17.58	
62.5	196	196	1.0000		17.58	
63.5						

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 384 HOUSE REGULATOR INSTALLATIONS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1933-2003			EXPERIENCE BAND 1972-2011		
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	3,683,726		0.0000	1.0000	100.00
0.5	3,742,437	1,701	0.0005	0.9995	100.00
1.5	3,799,240	4,159	0.0011	0.9989	99.95
2.5	3,868,748		0.0000	1.0000	99.85
3.5	3,936,687	3,137	0.0008	0.9992	99.85
4.5	4,012,002	11,608	0.0029	0.9971	99.77
5.5	4,104,158	358	0.0001	0.9999	99.48
6.5	4,157,656	290	0.0001	0.9999	99.47
7.5	4,197,199	119	0.0000	1.0000	99.46
8.5	4,115,571	1,612	0.0004	0.9996	99.46
9.5	3,997,517	1,320	0.0003	0.9997	99.42
10.5	3,792,788	418	0.0001	0.9999	99.39
11.5	3,611,398	631	0.0002	0.9998	99.38
12.5	3,493,726	1,091	0.0003	0.9997	99.36
13.5	3,330,648	873	0.0003	0.9997	99.33
14.5	3,171,622	394	0.0001	0.9999	99.30
15.5	3,072,555	2,569	0.0008	0.9992	99.29
16.5	2,945,997	197	0.0001	0.9999	99.21
17.5	2,775,399	2,314	0.0008	0.9992	99.20
18.5	2,681,314	5,834	0.0022	0.9978	99.12
19.5	2,553,339	32,648	0.0128	0.9872	98.90
20.5	2,396,154	24,335	0.0102	0.9898	97.64
21.5	2,234,848	58,644	0.0262	0.9738	96.64
22.5	2,033,132	149,434	0.0735	0.9265	94.11
23.5	1,712,997	101,997	0.0595	0.9405	87.19
24.5	1,451,425	44,078	0.0304	0.9696	82.00
25.5	1,283,118	13,860	0.0108	0.9892	79.51
26.5	1,153,188	15,780	0.0137	0.9863	78.65
27.5	1,037,639	13,865	0.0134	0.9866	77.57
28.5	929,717	16,265	0.0175	0.9825	76.54
29.5	801,910	36,160	0.0451	0.9549	75.20
30.5	663,214	24,297	0.0366	0.9634	71.81
31.5	564,404	16,051	0.0284	0.9716	69.18
32.5	513,618	10,544	0.0205	0.9795	67.21
33.5	501,770	10,598	0.0211	0.9789	65.83
34.5	491,172	11,068	0.0225	0.9775	64.44
35.5	466,478	8,986	0.0193	0.9807	62.99
36.5	431,775	11,272	0.0261	0.9739	61.77
37.5	404,545	16,051	0.0397	0.9603	60.16
38.5	347,245	2,411	0.0069	0.9931	57.78

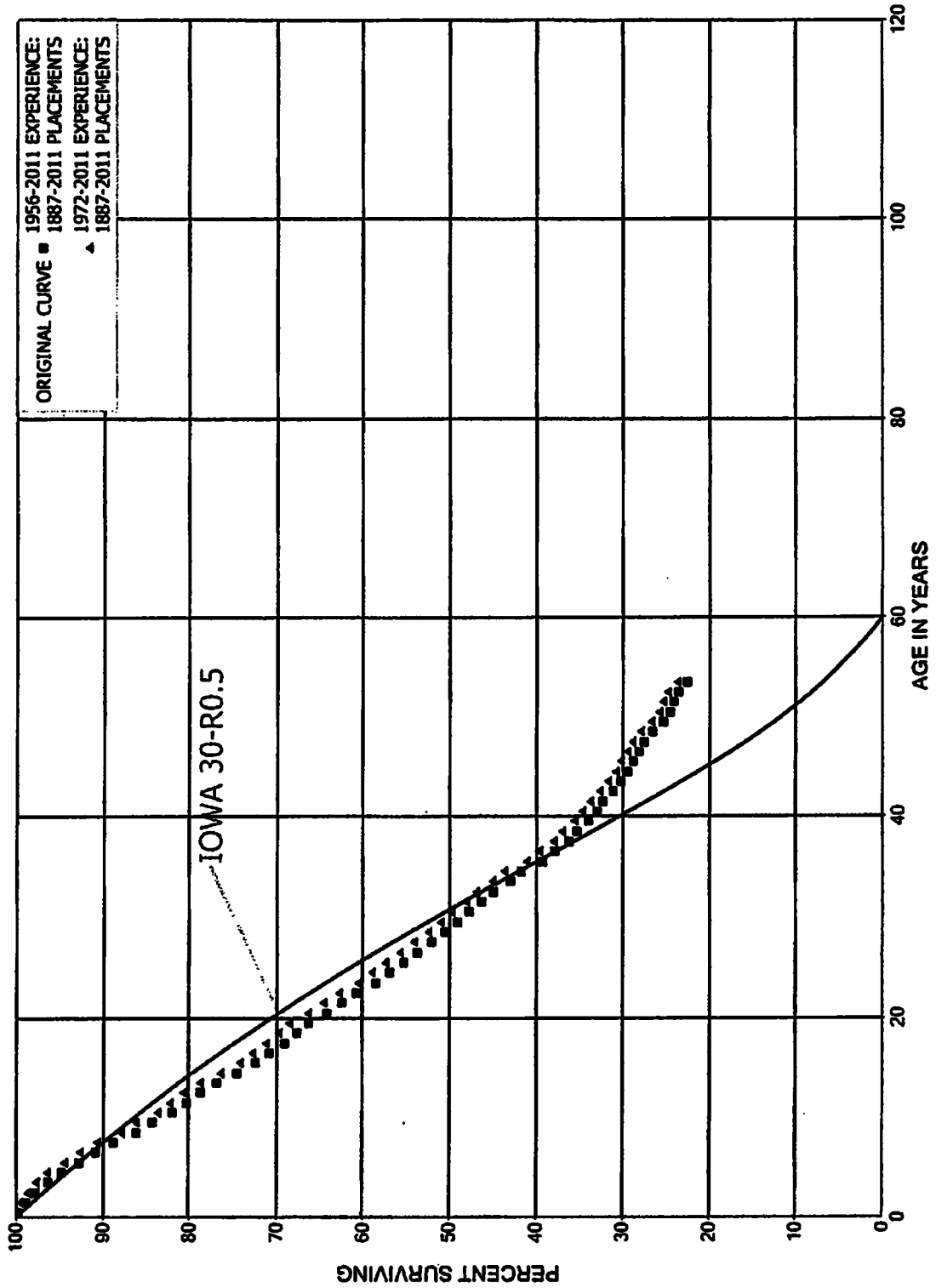
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 384 HOUSE REGULATOR INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1933-2003			EXPERIENCE BAND 1972-2011			
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	314,239	3,000	0.0095	0.9905	57.37	
40.5	259,105	1,004	0.0039	0.9961	56.83	
41.5	203,233	904	0.0044	0.9956	56.61	
42.5	164,877	808	0.0049	0.9951	56.35	
43.5	137,585	758	0.0055	0.9945	56.08	
44.5	119,721	2,030	0.0170	0.9830	55.77	
45.5	104,386	1,485	0.0142	0.9858	54.82	
46.5	88,427	2,210	0.0250	0.9750	54.04	
47.5	73,197	138	0.0019	0.9981	52.69	
48.5	63,630	5	0.0001	0.9999	52.59	
49.5	57,289		0.0000	1.0000	52.59	
50.5	51,518		0.0000	1.0000	52.59	
51.5	44,631		0.0000	1.0000	52.59	
52.5	34,126	10	0.0003	0.9997	52.59	
53.5	25,131	2,768	0.1101	0.8899	52.57	
54.5	11,270	6,976	0.6190	0.3810	46.78	
55.5	196		0.0000	1.0000	17.83	
56.5	196		0.0000	1.0000	17.83	
57.5	196		0.0000	1.0000	17.83	
58.5	196		0.0000	1.0000	17.83	
59.5	196		0.0000	1.0000	17.83	
60.5	196		0.0000	1.0000	17.83	
61.5	196		0.0000	1.0000	17.83	
62.5	196	196	1.0000		17.83	
63.5						

COLUMBIA GAS OF PENNSYLVANIA, INC.  
 ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT - OTHER THAN METERS  
 ORIGINAL AND SMOOTH SURVIVOR CURVES



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT - OTHER  
THAN METERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1987-2011

EXPERIENCE BAND 1956-2011

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	9,846,044	31,466	0.0032	0.9968	100.00
0.5	9,658,632	82,414	0.0085	0.9915	99.68
1.5	9,422,313	106,109	0.0113	0.9887	98.83
2.5	9,212,577	130,721	0.0142	0.9858	97.72
3.5	8,915,893	149,854	0.0168	0.9832	96.33
4.5	8,546,173	181,090	0.0212	0.9788	94.71
5.5	8,292,410	162,988	0.0197	0.9803	92.70
6.5	8,084,560	182,568	0.0226	0.9774	90.88
7.5	7,932,271	236,966	0.0299	0.9701	88.83
8.5	7,166,561	155,805	0.0217	0.9783	86.18
9.5	6,718,518	191,829	0.0286	0.9714	84.30
10.5	6,515,676	126,215	0.0194	0.9806	81.90
11.5	6,215,176	123,217	0.0198	0.9802	80.31
12.5	6,013,106	145,320	0.0242	0.9758	78.72
13.5	5,655,611	167,795	0.0297	0.9703	76.81
14.5	5,323,598	152,850	0.0287	0.9713	74.54
15.5	4,950,484	107,214	0.0217	0.9783	72.40
16.5	4,704,718	117,202	0.0249	0.9751	70.83
17.5	4,390,658	92,467	0.0211	0.9789	69.06
18.5	4,168,190	79,445	0.0191	0.9809	67.61
19.5	3,999,511	132,411	0.0331	0.9669	66.32
20.5	3,746,746	98,553	0.0263	0.9737	64.12
21.5	3,564,772	100,011	0.0281	0.9719	62.44
22.5	3,386,815	121,739	0.0359	0.9641	60.69
23.5	3,121,731	84,847	0.0272	0.9728	58.50
24.5	3,010,413	83,462	0.0277	0.9723	56.91
25.5	2,809,912	80,243	0.0286	0.9714	55.34
26.5	2,671,661	82,499	0.0309	0.9691	53.76
27.5	2,549,336	75,285	0.0295	0.9705	52.10
28.5	2,394,021	69,711	0.0291	0.9709	50.56
29.5	2,199,453	58,609	0.0266	0.9734	49.09
30.5	2,003,967	64,415	0.0321	0.9679	47.78
31.5	1,850,570	49,322	0.0267	0.9733	46.24
32.5	1,764,924	78,886	0.0447	0.9553	45.01
33.5	1,672,852	49,761	0.0297	0.9703	43.00
34.5	1,620,849	95,992	0.0592	0.9408	41.72
35.5	1,522,102	55,414	0.0364	0.9636	39.25
36.5	1,435,997	61,041	0.0425	0.9575	37.82
37.5	1,339,369	33,349	0.0249	0.9751	36.21
38.5	1,252,706	49,537	0.0395	0.9605	35.31

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT - OTHER  
THAN METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1887-2011			EXPERIENCE BAND 1956-2011		
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	1,100,790	29,396	0.0267	0.9733	33.91
40.5	941,145	22,060	0.0234	0.9766	33.01
41.5	853,771	29,821	0.0349	0.9651	32.23
42.5	760,710	23,086	0.0303	0.9697	31.11
43.5	668,580	18,189	0.0272	0.9728	30.16
44.5	582,798	11,913	0.0204	0.9796	29.34
45.5	537,875	12,557	0.0233	0.9767	28.74
46.5	480,160	10,453	0.0218	0.9782	28.07
47.5	430,974	14,854	0.0345	0.9655	27.46
48.5	373,425	16,694	0.0447	0.9553	26.52
49.5	342,316	10,507	0.0307	0.9693	25.33
50.5	290,038	5,168	0.0178	0.9822	24.55
51.5	231,068	5,533	0.0239	0.9761	24.11
52.5	200,401	8,663	0.0432	0.9568	23.54
53.5	158,015	2,434	0.0154	0.9846	22.52
54.5	123,612	5,916	0.0479	0.9521	22.17
55.5	90,059	5,788	0.0643	0.9357	21.11
56.5	57,199	1,385	0.0242	0.9758	19.75
57.5	41,067	2,169	0.0528	0.9472	19.28
58.5	31,390	783	0.0249	0.9751	18.26
59.5	24,611	250	0.0102	0.9898	17.80
60.5	19,525	26	0.0013	0.9987	17.62
61.5	17,146	809	0.0472	0.9528	17.60
62.5	16,337	1,251	0.0766	0.9234	16.77
63.5	13,602		0.0000	1.0000	15.48
64.5	12,741	27	0.0021	0.9979	15.48
65.5	12,656	80	0.0063	0.9937	15.45
66.5	11,902	141	0.0119	0.9881	15.35
67.5	10,795		0.0000	1.0000	15.17
68.5	6,570		0.0000	1.0000	15.17
69.5	5,899	694	0.1177	0.8823	15.17
70.5	4,833	80	0.0166	0.9834	13.39
71.5	4,803	484	0.1008	0.8992	13.16
72.5	4,098	50	0.0122	0.9878	11.84
73.5	3,766		0.0000	1.0000	11.69
74.5	2,620		0.0000	1.0000	11.69
75.5	2,668	17	0.0064	0.9936	11.69
76.5	2,532	21	0.0084	0.9916	11.62
77.5	2,498	12	0.0048	0.9952	11.52
78.5	2,191	47	0.0216	0.9784	11.46

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT - OTHER  
THAN METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1887-2011			EXPERIENCE BAND 1956-2011		
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	2,144		0.0000	1.0000	11.22
80.5	2,002	46	0.0229	0.9771	11.22
81.5	1,180	24	0.0203	0.9797	10.96
82.5	402	99	0.2473	0.7527	10.74
83.5	194		0.0000	1.0000	8.08
84.5	194		0.0000	1.0000	8.08
85.5	209	58	0.2778	0.7222	8.08
86.5	151		0.0000	1.0000	5.84
87.5	151		0.0000	1.0000	5.84
88.5	151		0.0000	1.0000	5.84
89.5	140		0.0000	1.0000	5.84
90.5	140		0.0000	1.0000	5.84
91.5	140	53	0.3772	0.6228	5.84
92.5	87		0.0000	1.0000	3.63
93.5	87		0.0000	1.0000	3.63
94.5	87		0.0000	1.0000	3.63
95.5	87		0.0000	1.0000	3.63
96.5	87		0.0000	1.0000	3.63
97.5	87		0.0000	1.0000	3.63
98.5	87		0.0000	1.0000	3.63
99.5	87		0.0000	1.0000	3.63
100.5	87		0.0000	1.0000	3.63
101.5	87		0.0000	1.0000	3.63
102.5	87		0.0000	1.0000	3.63
103.5	87		0.0000	1.0000	3.63
104.5	87		0.0000	1.0000	3.63
105.5	87		0.0000	1.0000	3.63
106.5	87		0.0000	1.0000	3.63
107.5	87		0.0000	1.0000	3.63
108.5	87		0.0000	1.0000	3.63
109.5	63		0.0000	1.0000	3.63
110.5	63		0.0000	1.0000	3.63
111.5	63		0.0000	1.0000	3.63
112.5	63		0.0000	1.0000	3.63
113.5	63		0.0000	1.0000	3.63
114.5	63	15	0.2412	0.7588	3.63
115.5	48		0.0000	1.0000	2.76
116.5	48		0.0000	1.0000	2.76
117.5	48		0.0000	1.0000	2.76
118.5	24		0.0000	1.0000	2.76



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT - OTHER  
 THAN METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1887-2011			EXPERIENCE BAND 1956-2011		
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	24		0.0000	1.0000	2.76
120.5	24		0.0000	1.0000	2.76
121.5					2.76

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT - OTHER  
THAN METERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1887-2011			EXPERIENCE BAND 1972-2011		
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	7,492,123	4,654	0.0006	0.9994	100.00
0.5	7,682,418	41,278	0.0054	0.9946	99.94
1.5	7,553,400	64,513	0.0085	0.9915	99.40
2.5	7,509,547	75,814	0.0101	0.9899	98.55
3.5	7,350,463	95,906	0.0130	0.9870	97.56
4.5	7,194,057	147,954	0.0206	0.9794	96.28
5.5	6,984,058	130,736	0.0187	0.9813	94.30
6.5	6,854,977	152,251	0.0222	0.9778	92.54
7.5	6,802,375	207,702	0.0305	0.9695	90.48
8.5	6,176,440	115,654	0.0187	0.9813	87.72
9.5	5,793,368	169,633	0.0293	0.9707	86.08
10.5	5,703,472	100,760	0.0177	0.9823	83.56
11.5	5,529,829	105,828	0.0191	0.9809	82.08
12.5	5,420,127	126,460	0.0233	0.9767	80.51
13.5	5,152,788	155,303	0.0301	0.9699	78.63
14.5	4,904,060	140,378	0.0286	0.9714	76.26
15.5	4,613,545	88,111	0.0191	0.9809	74.08
16.5	4,448,905	97,689	0.0220	0.9780	72.66
17.5	4,187,227	83,621	0.0200	0.9800	71.07
18.5	3,990,097	73,312	0.0184	0.9816	69.65
19.5	3,855,248	124,649	0.0323	0.9677	68.37
20.5	3,638,907	95,493	0.0262	0.9738	66.16
21.5	3,474,020	95,872	0.0276	0.9724	64.42
22.5	3,296,953	118,113	0.0358	0.9642	62.65
23.5	3,035,020	77,166	0.0254	0.9746	60.40
24.5	2,934,015	80,271	0.0274	0.9726	58.87
25.5	2,736,334	78,421	0.0287	0.9713	57.25
26.5	2,602,557	79,870	0.0307	0.9693	55.61
27.5	2,485,504	74,653	0.0300	0.9700	53.91
28.5	2,343,340	64,295	0.0274	0.9726	52.29
29.5	2,154,728	54,075	0.0251	0.9749	50.85
30.5	1,965,515	63,466	0.0323	0.9677	49.58
31.5	1,814,801	45,741	0.0252	0.9748	47.98
32.5	1,733,230	73,166	0.0422	0.9578	46.77
33.5	1,652,508	48,958	0.0296	0.9704	44.79
34.5	1,601,915	93,988	0.0587	0.9413	43.47
35.5	1,505,883	52,810	0.0351	0.9649	40.92
36.5	1,424,993	60,944	0.0428	0.9572	39.48
37.5	1,328,618	32,223	0.0243	0.9757	37.79
38.5	1,247,158	49,337	0.0396	0.9604	36.88

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT - OTHER  
THAN METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1887-2011			EXPERIENCE BAND 1972-2011		
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	1,095,484	29,157	0.0266	0.9734	35.42
40.5	937,905	21,968	0.0234	0.9766	34.47
41.5	851,765	29,690	0.0349	0.9651	33.67
42.5	759,025	23,021	0.0303	0.9697	32.49
43.5	667,316	18,066	0.0271	0.9729	31.51
44.5	581,747	11,818	0.0203	0.9797	30.65
45.5	536,946	12,477	0.0232	0.9768	30.03
46.5	479,384	10,445	0.0218	0.9782	29.33
47.5	430,173	14,854	0.0345	0.9655	28.70
48.5	372,617	16,694	0.0448	0.9552	27.70
49.5	342,162	10,493	0.0307	0.9693	26.46
50.5	289,899	5,153	0.0178	0.9822	25.65
51.5	230,935	5,525	0.0239	0.9761	25.20
52.5	200,277	8,663	0.0433	0.9567	24.59
53.5	157,921	2,395	0.0152	0.9848	23.53
54.5	123,422	5,785	0.0469	0.9531	23.17
55.5	90,020	5,788	0.0643	0.9357	22.09
56.5	57,123	1,385	0.0242	0.9758	20.67
57.5	40,994	2,169	0.0529	0.9471	20.17
58.5	31,318	778	0.0248	0.9752	19.10
59.5	24,544	250	0.0102	0.9898	18.62
60.5	19,457	26	0.0013	0.9987	18.43
61.5	17,078	809	0.0473	0.9527	18.41
62.5	16,269	1,251	0.0769	0.9231	17.54
63.5	13,511		0.0000	1.0000	16.19
64.5	12,649	27	0.0021	0.9979	16.19
65.5	12,565	80	0.0064	0.9936	16.15
66.5	11,810	141	0.0120	0.9880	16.05
67.5	10,704		0.0000	1.0000	15.86
68.5	6,479		0.0000	1.0000	15.86
69.5	5,855	694	0.1186	0.8814	15.86
70.5	4,790	80	0.0167	0.9833	13.98
71.5	4,803	484	0.1008	0.8992	13.74
72.5	4,050	50	0.0124	0.9876	12.36
73.5	3,718		0.0000	1.0000	12.21
74.5	2,572		0.0000	1.0000	12.21
75.5	2,572	17	0.0066	0.9934	12.21
76.5	2,436	21	0.0088	0.9912	12.13
77.5	2,402	12	0.0050	0.9950	12.02
78.5	2,143	47	0.0220	0.9780	11.96

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT - OTHER  
THAN METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1887-2011			EXPERIENCE BAND 1972-2011			
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	2,096		0.0000	1.0000	11.70	
80.5	1,954	46	0.0235	0.9765	11.70	
81.5	1,180	24	0.0203	0.9797	11.42	
82.5	402	99	0.2473	0.7527	11.19	
83.5	194		0.0000	1.0000	8.42	
84.5	194		0.0000	1.0000	8.42	
85.5	209	58	0.2778	0.7222	8.42	
86.5	151		0.0000	1.0000	6.08	
87.5	151		0.0000	1.0000	6.08	
88.5	151		0.0000	1.0000	6.08	
89.5	140		0.0000	1.0000	6.08	
90.5	140		0.0000	1.0000	6.08	
91.5	140	53	0.3772	0.6228	6.08	
92.5	87		0.0000	1.0000	3.79	
93.5	87		0.0000	1.0000	3.79	
94.5	87		0.0000	1.0000	3.79	
95.5	87		0.0000	1.0000	3.79	
96.5	87		0.0000	1.0000	3.79	
97.5	87		0.0000	1.0000	3.79	
98.5	87		0.0000	1.0000	3.79	
99.5	87		0.0000	1.0000	3.79	
100.5	87		0.0000	1.0000	3.79	
101.5	87		0.0000	1.0000	3.79	
102.5	87		0.0000	1.0000	3.79	
103.5	87		0.0000	1.0000	3.79	
104.5	87		0.0000	1.0000	3.79	
105.5	87		0.0000	1.0000	3.79	
106.5	87		0.0000	1.0000	3.79	
107.5	87		0.0000	1.0000	3.79	
108.5	87		0.0000	1.0000	3.79	
109.5	63		0.0000	1.0000	3.79	
110.5	63		0.0000	1.0000	3.79	
111.5	63		0.0000	1.0000	3.79	
112.5	63		0.0000	1.0000	3.79	
113.5	63		0.0000	1.0000	3.79	
114.5	63	15	0.2412	0.7588	3.79	
115.5	48		0.0000	1.0000	2.87	
116.5	48		0.0000	1.0000	2.87	
117.5	48		0.0000	1.0000	2.87	
118.5	24		0.0000	1.0000	2.87	

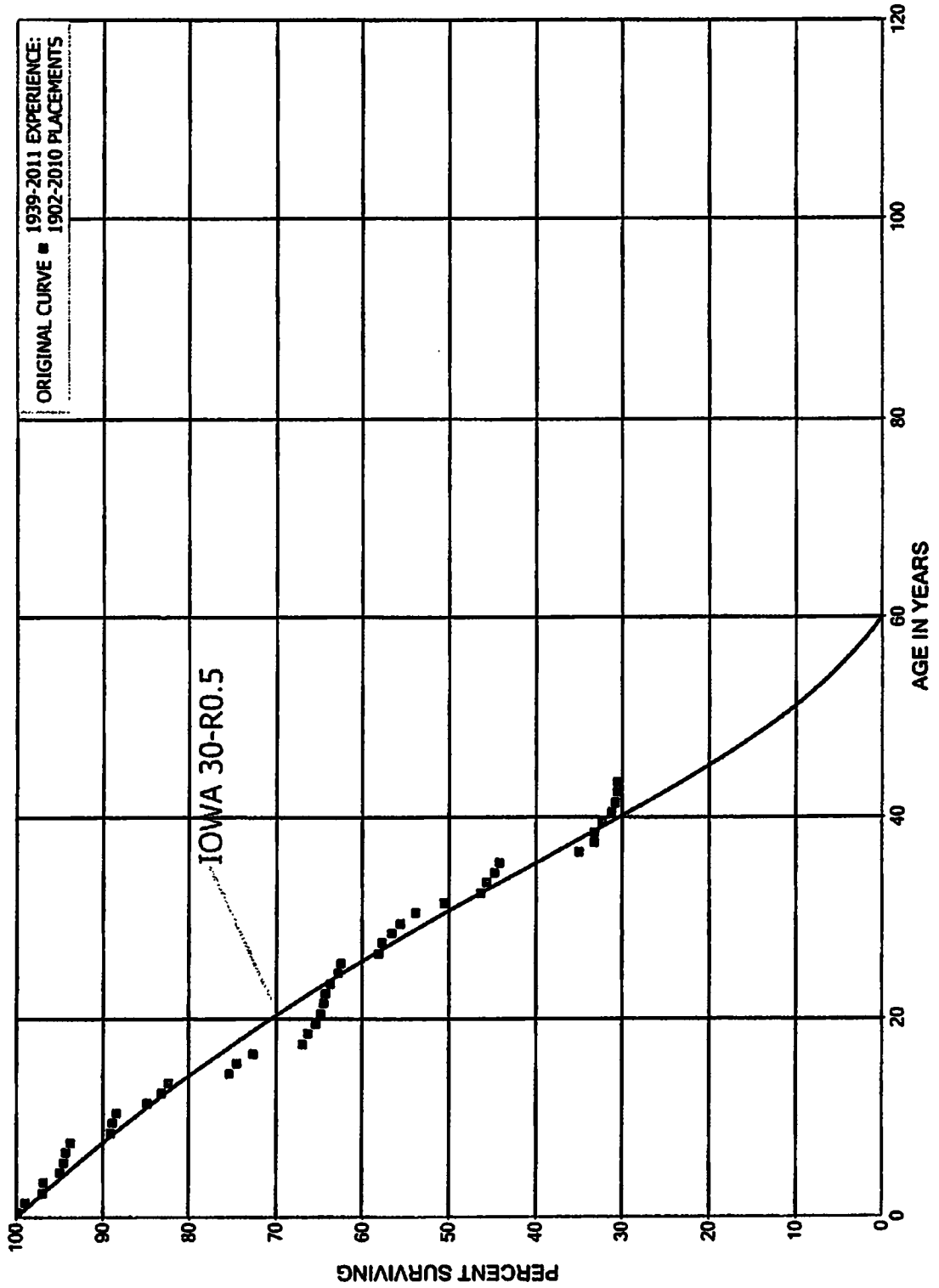
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT - OTHER  
 THAN METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1887-2011			EXPERIENCE BAND 1972-2011		
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	24		0.0000	1.0000	2.87
120.5	24		0.0000	1.0000	2.87
121.5					2.87

COLUMBIA GAS OF PENNSYLVANIA, INC.  
ACCOUNT 387 OTHER EQUIPMENT - GENERAL  
ORIGINAL AND SMOOTH SURVIVOR CURVES



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 387 OTHER EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE

PLACEMENT BAND 1902-2010			EXPERIENCE BAND 1939-2011		
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	311,617	569	0.0018	0.9982	100.00
0.5	314,751	2,879	0.0091	0.9909	99.82
1.5	256,209	5,032	0.0196	0.9804	98.90
2.5	255,606	434	0.0017	0.9983	96.96
3.5	254,782	4,881	0.0192	0.9808	96.80
4.5	262,020	1,221	0.0047	0.9953	94.94
5.5	255,084	650	0.0025	0.9975	94.50
6.5	251,252	1,423	0.0057	0.9943	94.26
7.5	246,883	12,163	0.0493	0.9507	93.73
8.5	212,959	781	0.0037	0.9963	89.11
9.5	212,258	1,039	0.0049	0.9951	88.78
10.5	214,229	8,483	0.0396	0.9604	88.35
11.5	206,942	4,126	0.0199	0.9801	84.85
12.5	202,673	1,962	0.0097	0.9903	83.16
13.5	200,457	16,985	0.0847	0.9153	82.35
14.5	181,633	2,175	0.0120	0.9880	75.37
15.5	177,246	4,432	0.0250	0.9750	74.47
16.5	171,486	13,461	0.0785	0.9215	72.61
17.5	158,072	1,443	0.0091	0.9909	66.91
18.5	156,995	2,189	0.0139	0.9861	66.30
19.5	152,519	1,231	0.0081	0.9919	65.37
20.5	151,288	851	0.0056	0.9944	64.85
21.5	149,648	547	0.0037	0.9963	64.48
22.5	148,687	1,225	0.0082	0.9918	64.25
23.5	148,610	2,127	0.0143	0.9857	63.72
24.5	147,381	776	0.0053	0.9947	62.81
25.5	146,605	9,979	0.0681	0.9319	62.48
26.5	122,303	1,144	0.0094	0.9906	58.22
27.5	121,048	2,124	0.0175	0.9825	57.68
28.5	118,557	2,246	0.0189	0.9811	56.67
29.5	115,844	3,591	0.0310	0.9690	55.59
30.5	98,723	6,112	0.0619	0.9381	53.87
31.5	92,612	7,792	0.0841	0.9159	50.53
32.5	84,617	1,184	0.0140	0.9860	46.28
33.5	81,727	1,534	0.0188	0.9812	45.64
34.5	73,511	1,062	0.0144	0.9856	44.78
35.5	72,254	15,093	0.2089	0.7911	44.13
36.5	57,165	2,780	0.0486	0.9514	34.91
37.5	54,295	33	0.0006	0.9994	33.22
38.5	54,235	1,517	0.0280	0.9720	33.20

COLUMBIA GAS OF PENNSYLVANIA, INC.

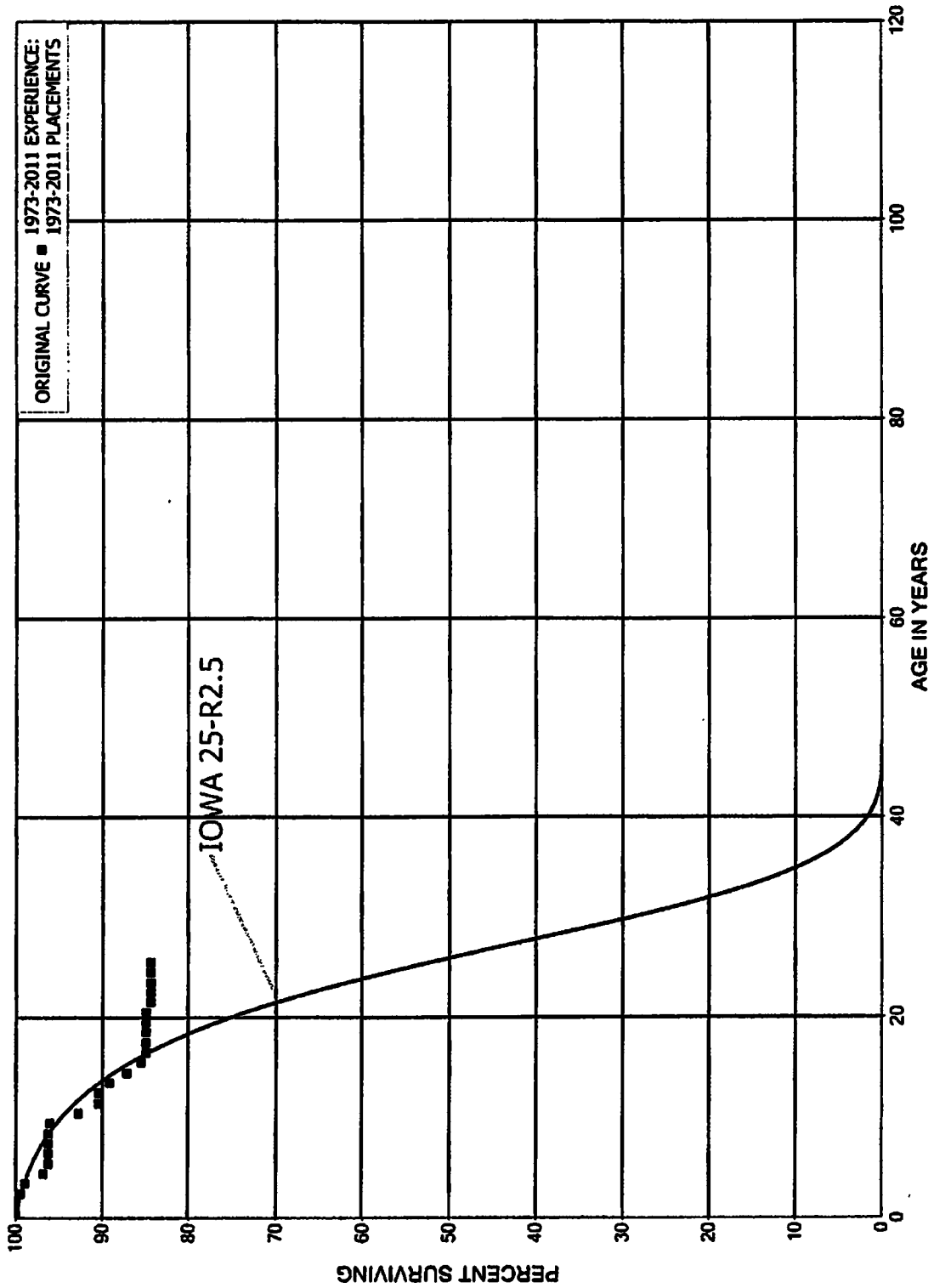
ACCOUNT 387 OTHER EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1902-2010			EXPERIENCE BAND 1939-2011			
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	44,808	1,505	0.0336	0.9664	32.27	
40.5	43,304	676	0.0156	0.9844	31.18	
41.5	42,628	217	0.0051	0.9949	30.70	
42.5	42,391	99	0.0023	0.9977	30.54	
43.5	42,181	64	0.0015	0.9985	30.47	
44.5	41,673	263	0.0063	0.9937	30.42	
45.5	40,802	67	0.0016	0.9984	30.23	
46.5	40,736	82	0.0020	0.9980	30.18	
47.5	40,653		0.0000	1.0000	30.12	
48.5	40,653		0.0000	1.0000	30.12	
49.5	33,021	6,669	0.2020	0.7980	30.12	
50.5	26,352		0.0000	1.0000	24.04	
51.5	26,352	263	0.0100	0.9900	24.04	
52.5	25,900	263	0.0101	0.9899	23.80	
53.5	25,558		0.0000	1.0000	23.56	
54.5	11,183	166	0.0149	0.9851	23.56	
55.5	11,017		0.0000	1.0000	23.21	
56.5	2,034		0.0000	1.0000	23.21	
57.5	2,034	1,053	0.5178	0.4822	23.21	
58.5	981	645	0.6581	0.3419	11.19	
59.5	335	40	0.1198	0.8802	3.83	
60.5	295		0.0000	1.0000	3.37	
61.5	205	11	0.0531	0.9469	3.37	
62.5	194		0.0000	1.0000	3.19	
63.5	194		0.0000	1.0000	3.19	
64.5	194	5	0.0232	0.9768	3.19	
65.5	190		0.0000	1.0000	3.11	
66.5	190	2	0.0106	0.9894	3.11	
67.5	188	12	0.0617	0.9383	3.08	
68.5	176		0.0000	1.0000	2.89	
69.5	38		0.0000	1.0000	2.89	
70.5					2.89	



COLUMBIA GAS OF PENNSYLVANIA, INC.  
ACCOUNT 387.4 OTHER EQUIPMENT - CUSTOMER INFORMATION SERVICES  
ORIGINAL AND SMOOTH SURVIVOR CURVES



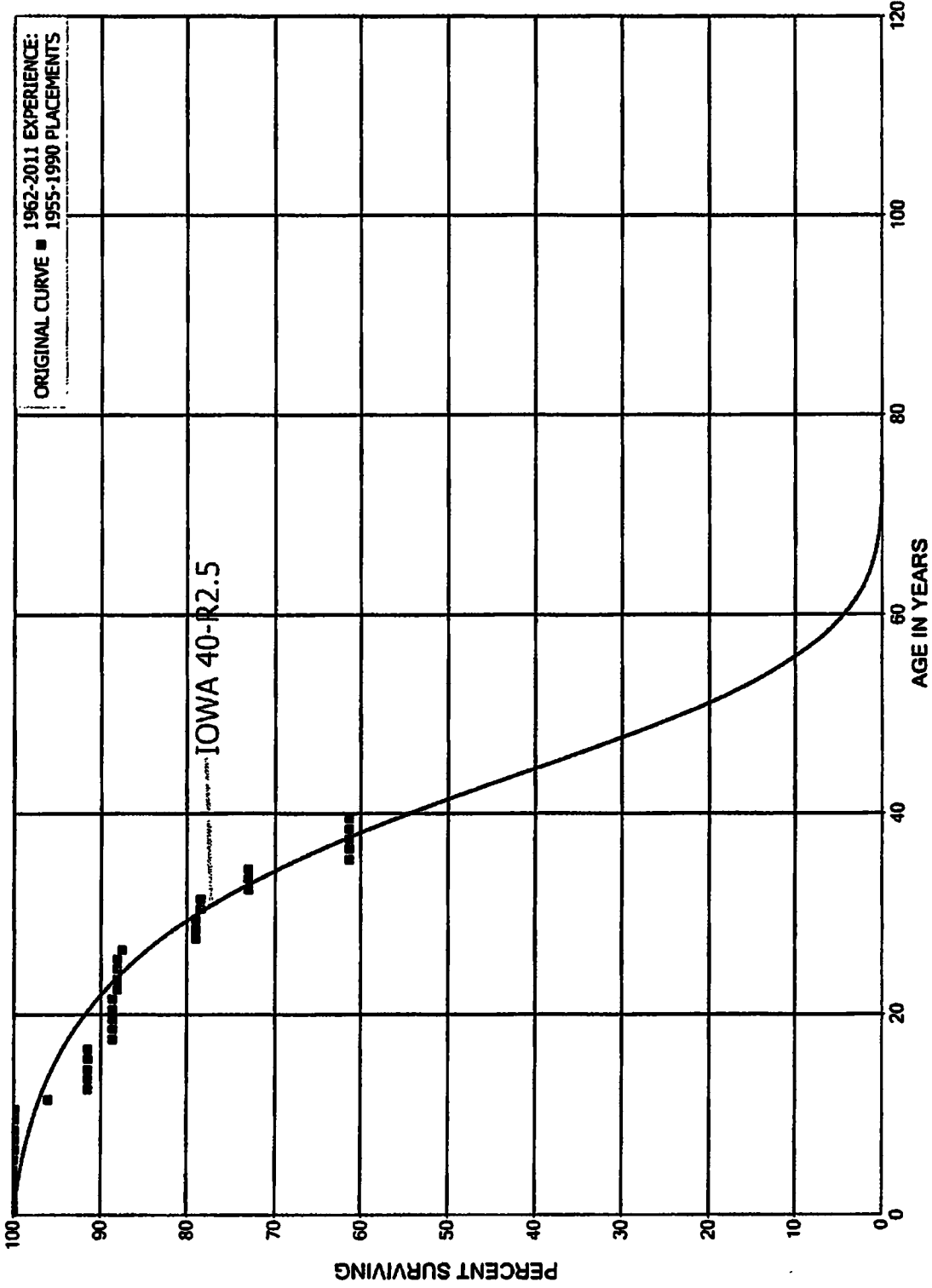
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 387.4 OTHER EQUIPMENT - CUSTOMER INFORMATION SERVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1973-2011			EXPERIENCE BAND 1973-2011		
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	1,115,435		0.0000	1.0000	100.00
0.5	1,103,006	900	0.0008	0.9992	100.00
1.5	980,496	4,801	0.0049	0.9951	99.92
2.5	967,235	6,294	0.0065	0.9935	99.43
3.5	960,940	19,945	0.0208	0.9792	98.78
4.5	931,057	5,100	0.0055	0.9945	96.73
5.5	884,778		0.0000	1.0000	96.20
6.5	618,693		0.0000	1.0000	96.20
7.5	499,116		0.0000	1.0000	96.20
8.5	496,790	1,159	0.0023	0.9977	96.20
9.5	495,631	16,978	0.0343	0.9657	95.98
10.5	336,187	8,448	0.0251	0.9749	92.69
11.5	277,560		0.0000	1.0000	90.36
12.5	277,560	3,511	0.0126	0.9874	90.36
13.5	274,049	6,349	0.0232	0.9768	89.22
14.5	267,700	4,937	0.0184	0.9816	87.15
15.5	262,763	1,836	0.0070	0.9930	85.54
16.5	260,926		0.0000	1.0000	84.95
17.5	256,844		0.0000	1.0000	84.95
18.5	255,126		0.0000	1.0000	84.95
19.5	248,615		0.0000	1.0000	84.95
20.5	210,370	1,490	0.0071	0.9929	84.95
21.5	170,927		0.0000	1.0000	84.34
22.5	167,501		0.0000	1.0000	84.34
23.5	167,501		0.0000	1.0000	84.34
24.5	127,496		0.0000	1.0000	84.34
25.5	65,900		0.0000	1.0000	84.34
26.5	38,547		0.0000	1.0000	84.34
27.5	33,816		0.0000	1.0000	84.34
28.5	23,121		0.0000	1.0000	84.34
29.5	23,121		0.0000	1.0000	84.34
30.5	23,121		0.0000	1.0000	84.34
31.5	21,976		0.0000	1.0000	84.34
32.5	21,976		0.0000	1.0000	84.34
33.5	21,976		0.0000	1.0000	84.34
34.5	21,976		0.0000	1.0000	84.34
35.5	15,667		0.0000	1.0000	84.34
36.5	12,478		0.0000	1.0000	84.34
37.5	917		0.0000	1.0000	84.34
38.5					84.34

COLUMBIA GAS OF PENNSYLVANIA, INC.  
ACCOUNT 390 STRUCTURES AND IMPROVEMENTS - COMMUNICATIONS  
ORIGINAL AND SMOOTH SURVIVOR CURVES



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 390 STRUCTURES AND IMPROVEMENTS - COMMUNICATIONS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1955-1990			EXPERIENCE BAND 1962-2011		
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	53,278		0.0000	1.0000	100.00
0.5	53,278		0.0000	1.0000	100.00
1.5	53,278		0.0000	1.0000	100.00
2.5	55,408		0.0000	1.0000	100.00
3.5	56,248		0.0000	1.0000	100.00
4.5	63,839		0.0000	1.0000	100.00
5.5	67,451	140	0.0021	0.9979	100.00
6.5	68,481		0.0000	1.0000	99.79
7.5	68,481		0.0000	1.0000	99.79
8.5	68,481		0.0000	1.0000	99.79
9.5	68,481		0.0000	1.0000	99.79
10.5	68,481	2,559	0.0374	0.9626	99.79
11.5	65,922	3,138	0.0476	0.9524	96.06
12.5	62,784		0.0000	1.0000	91.49
13.5	62,784		0.0000	1.0000	91.49
14.5	62,784		0.0000	1.0000	91.49
15.5	62,784		0.0000	1.0000	91.49
16.5	62,784	1,982	0.0316	0.9684	91.49
17.5	60,802		0.0000	1.0000	88.60
18.5	60,802		0.0000	1.0000	88.60
19.5	60,802		0.0000	1.0000	88.60
20.5	60,802		0.0000	1.0000	88.60
21.5	59,981	368	0.0061	0.9939	88.60
22.5	59,614		0.0000	1.0000	88.06
23.5	50,185		0.0000	1.0000	88.06
24.5	43,398		0.0000	1.0000	88.06
25.5	43,398	257	0.0059	0.9941	88.06
26.5	43,142	4,164	0.0965	0.9035	87.54
27.5	35,527		0.0000	1.0000	79.09
28.5	27,655		0.0000	1.0000	79.09
29.5	27,655	189	0.0068	0.9932	79.09
30.5	27,466		0.0000	1.0000	78.55
31.5	27,466	1,918	0.0698	0.9302	78.55
32.5	25,548		0.0000	1.0000	73.06
33.5	25,548		0.0000	1.0000	73.06
34.5	25,548	4,084	0.1599	0.8401	73.06
35.5	21,464		0.0000	1.0000	61.38
36.5	21,464		0.0000	1.0000	61.38
37.5	21,464		0.0000	1.0000	61.38
38.5	21,464		0.0000	1.0000	61.38

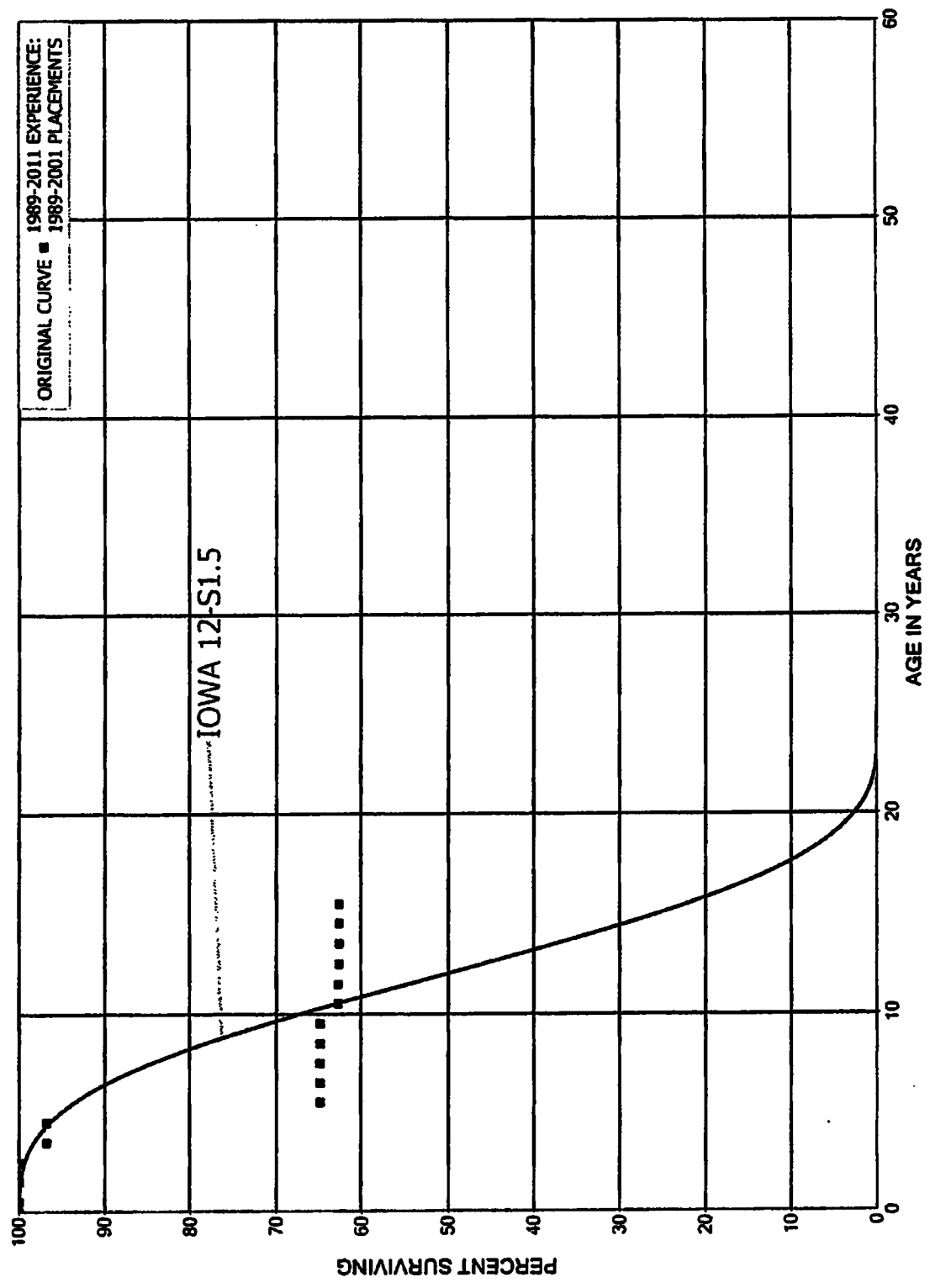
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 390 STRUCTURES AND IMPROVEMENTS - COMMUNICATIONS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1955-1990			EXPERIENCE BAND 1962-2011		
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	21,464		0.0000	1.0000	61.38
40.5	3,493		0.0000	1.0000	61.38
41.5	3,493		0.0000	1.0000	61.38
42.5	3,493		0.0000	1.0000	61.38
43.5	3,493		0.0000	1.0000	61.38
44.5	3,493		0.0000	1.0000	61.38
45.5	3,493		0.0000	1.0000	61.38
46.5	3,493		0.0000	1.0000	61.38
47.5	3,493		0.0000	1.0000	61.38
48.5	3,493		0.0000	1.0000	61.38
49.5	3,493		0.0000	1.0000	61.38
50.5	3,493		0.0000	1.0000	61.38
51.5	3,493		0.0000	1.0000	61.38
52.5	1,363		0.0000	1.0000	61.38
53.5	1,171		0.0000	1.0000	61.38
54.5	1,171		0.0000	1.0000	61.38
55.5	1,171		0.0000	1.0000	61.38
56.5					61.38

COLUMBIA GAS OF PENNSYLVANIA, INC.  
 ACCOUNT 394.12 TOOLS, SHOP AND GARAGE EQUIPMENT - CNG FACILITIES  
 ORIGINAL AND SMOOTH SURVIVOR CURVES



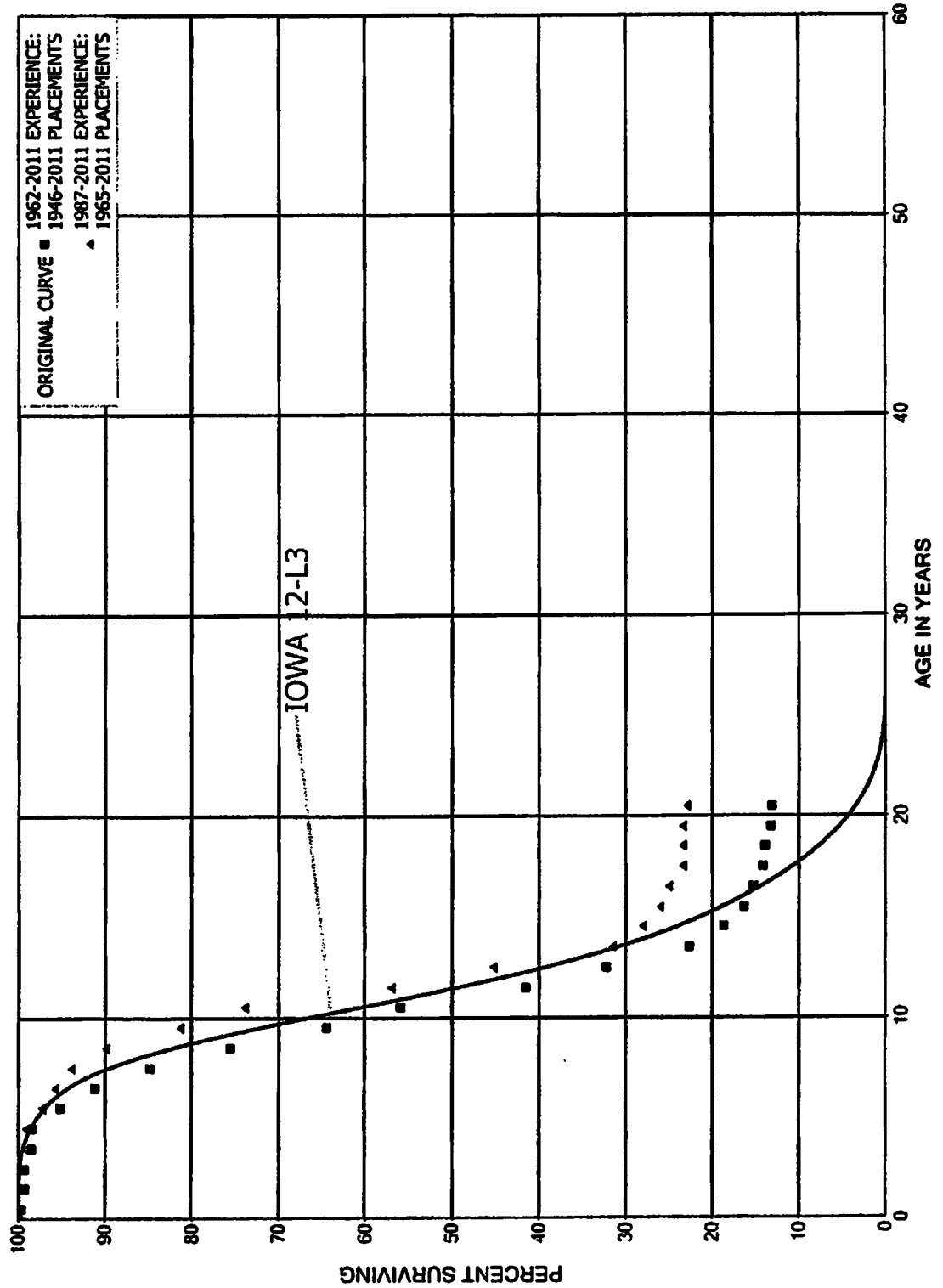
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 394.12 TOOLS, SHOP AND GARAGE EQUIPMENT - CNG FACILITIES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1989-2001		EXPERIENCE BAND 1989-2011			
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	3,121,665		0.0000	1.0000	100.00
0.5	3,121,665		0.0000	1.0000	100.00
1.5	3,121,665		0.0000	1.0000	100.00
2.5	3,121,665	103,870	0.0333	0.9667	100.00
3.5	3,017,795		0.0000	1.0000	96.67
4.5	3,017,795	993,540	0.3292	0.6708	96.67
5.5	2,024,255		0.0000	1.0000	64.85
6.5	2,024,255		0.0000	1.0000	64.85
7.5	2,024,255		0.0000	1.0000	64.85
8.5	2,024,255		0.0000	1.0000	64.85
9.5	2,024,255	65,288	0.0323	0.9677	64.85
10.5	1,878,220		0.0000	1.0000	62.75
11.5	1,878,220	4,406	0.0023	0.9977	62.75
12.5	1,855,364	1,064	0.0006	0.9994	62.61
13.5	1,755,899		0.0000	1.0000	62.57
14.5	1,755,899		0.0000	1.0000	62.57
15.5	1,475,807		0.0000	1.0000	62.57
16.5	340,339		0.0000	1.0000	62.57
17.5	222,411		0.0000	1.0000	62.57
18.5	126,466		0.0000	1.0000	62.57
19.5	126,466		0.0000	1.0000	62.57
20.5	101,772		0.0000	1.0000	62.57
21.5	99,674		0.0000	1.0000	62.57
22.5					62.57

COLUMBIA GAS OF PENNSYLVANIA, INC.  
ACCOUNT 396 POWER OPERATED EQUIPMENT  
ORIGINAL AND SMOOTH SURVIVOR CURVES





COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 396 POWER OPERATED EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1946-2011			EXPERIENCE BAND 1962-2011		
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	4,054,325	15,475	0.0038	0.9962	100.00
0.5	4,115,989	14,936	0.0036	0.9964	99.62
1.5	4,312,485		0.0000	1.0000	99.26
2.5	4,488,787	31,755	0.0071	0.9929	99.26
3.5	4,771,211	10,314	0.0022	0.9978	98.55
4.5	4,895,702	157,094	0.0321	0.9679	98.34
5.5	4,964,891	206,581	0.0416	0.9584	95.19
6.5	5,028,890	354,400	0.0705	0.9295	91.23
7.5	4,888,754	529,216	0.1083	0.8917	84.80
8.5	3,925,072	580,245	0.1478	0.8522	75.62
9.5	3,388,629	447,923	0.1322	0.8678	64.44
10.5	2,972,044	766,070	0.2578	0.7422	55.92
11.5	1,790,341	402,404	0.2248	0.7752	41.51
12.5	1,118,771	331,522	0.2963	0.7037	32.18
13.5	766,839	134,624	0.1756	0.8244	22.64
14.5	579,807	73,370	0.1265	0.8735	18.67
15.5	515,486	36,179	0.0702	0.9298	16.31
16.5	334,596	24,560	0.0734	0.9266	15.16
17.5	243,514	3,799	0.0156	0.9844	14.05
18.5	228,611	10,055	0.0440	0.9560	13.83
19.5	220,152	3,350	0.0152	0.9848	13.22
20.5	129,075	10,338	0.0801	0.9199	13.02
21.5	104,071		0.0000	1.0000	11.98
22.5	104,071	27,379	0.2631	0.7369	11.98
23.5	69,752		0.0000	1.0000	8.83
24.5	62,257		0.0000	1.0000	8.83
25.5	62,257		0.0000	1.0000	8.83
26.5	62,257		0.0000	1.0000	8.83
27.5	62,257	1,083	0.0174	0.9826	8.83
28.5	54,820		0.0000	1.0000	8.67
29.5	33,970		0.0000	1.0000	8.67
30.5	20,520		0.0000	1.0000	8.67
31.5	3,420		0.0000	1.0000	8.67
32.5	3,420		0.0000	1.0000	8.67
33.5	3,420		0.0000	1.0000	8.67
34.5	3,420		0.0000	1.0000	8.67
35.5	3,420		0.0000	1.0000	8.67
36.5	3,420		0.0000	1.0000	8.67
37.5	3,420		0.0000	1.0000	8.67
38.5	1,960		0.0000	1.0000	8.67

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 396 POWER OPERATED EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1946-2011			EXPERIENCE BAND 1962-2011		
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	1,960		0.0000	1.0000	8.67
40.5	1,960		0.0000	1.0000	8.67
41.5	1,413		0.0000	1.0000	8.67
42.5					8.67

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 396 POWER OPERATED EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1965-2011			EXPERIENCE BAND 1987-2011		
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	3,444,921		0.0000	1.0000	100.00
0.5	3,426,573		0.0000	1.0000	100.00
1.5	3,428,345		0.0000	1.0000	100.00
2.5	3,430,214	31,755	0.0093	0.9907	100.00
3.5	3,419,505	2,657	0.0008	0.9992	99.07
4.5	3,483,682	67,163	0.0193	0.9807	99.00
5.5	3,489,083	52,395	0.0150	0.9850	97.09
6.5	3,538,521	70,034	0.0198	0.9802	95.63
7.5	3,590,319	152,200	0.0424	0.9576	93.74
8.5	2,937,043	282,183	0.0961	0.9039	89.76
9.5	2,700,663	247,097	0.0915	0.9085	81.14
10.5	2,476,208	568,563	0.2296	0.7704	73.72
11.5	1,483,228	305,237	0.2058	0.7942	56.79
12.5	908,825	277,333	0.3052	0.6948	45.10
13.5	618,312	69,717	0.1128	0.8872	31.34
14.5	498,778	35,735	0.0716	0.9284	27.81
15.5	465,963	18,375	0.0394	0.9606	25.81
16.5	303,425	19,948	0.0657	0.9343	24.80
17.5	219,780		0.0000	1.0000	23.17
18.5	208,676		0.0000	1.0000	23.17
19.5	201,057	3,350	0.0167	0.9833	23.17
20.5	104,569	10,338	0.0989	0.9011	22.78
21.5	88,361		0.0000	1.0000	20.53
22.5	88,361	11,669	0.1321	0.8679	20.53
23.5	69,752		0.0000	1.0000	17.82
24.5	62,257		0.0000	1.0000	17.82
25.5	62,257		0.0000	1.0000	17.82
26.5	62,257		0.0000	1.0000	17.82
27.5	62,257	1,083	0.0174	0.9826	17.82
28.5	54,820		0.0000	1.0000	17.51
29.5	33,970		0.0000	1.0000	17.51
30.5	20,520		0.0000	1.0000	17.51
31.5	3,420		0.0000	1.0000	17.51
32.5	3,420		0.0000	1.0000	17.51
33.5	3,420		0.0000	1.0000	17.51
34.5	3,420		0.0000	1.0000	17.51
35.5	3,420		0.0000	1.0000	17.51
36.5	3,420		0.0000	1.0000	17.51
37.5	3,420		0.0000	1.0000	17.51
38.5	1,960		0.0000	1.0000	17.51

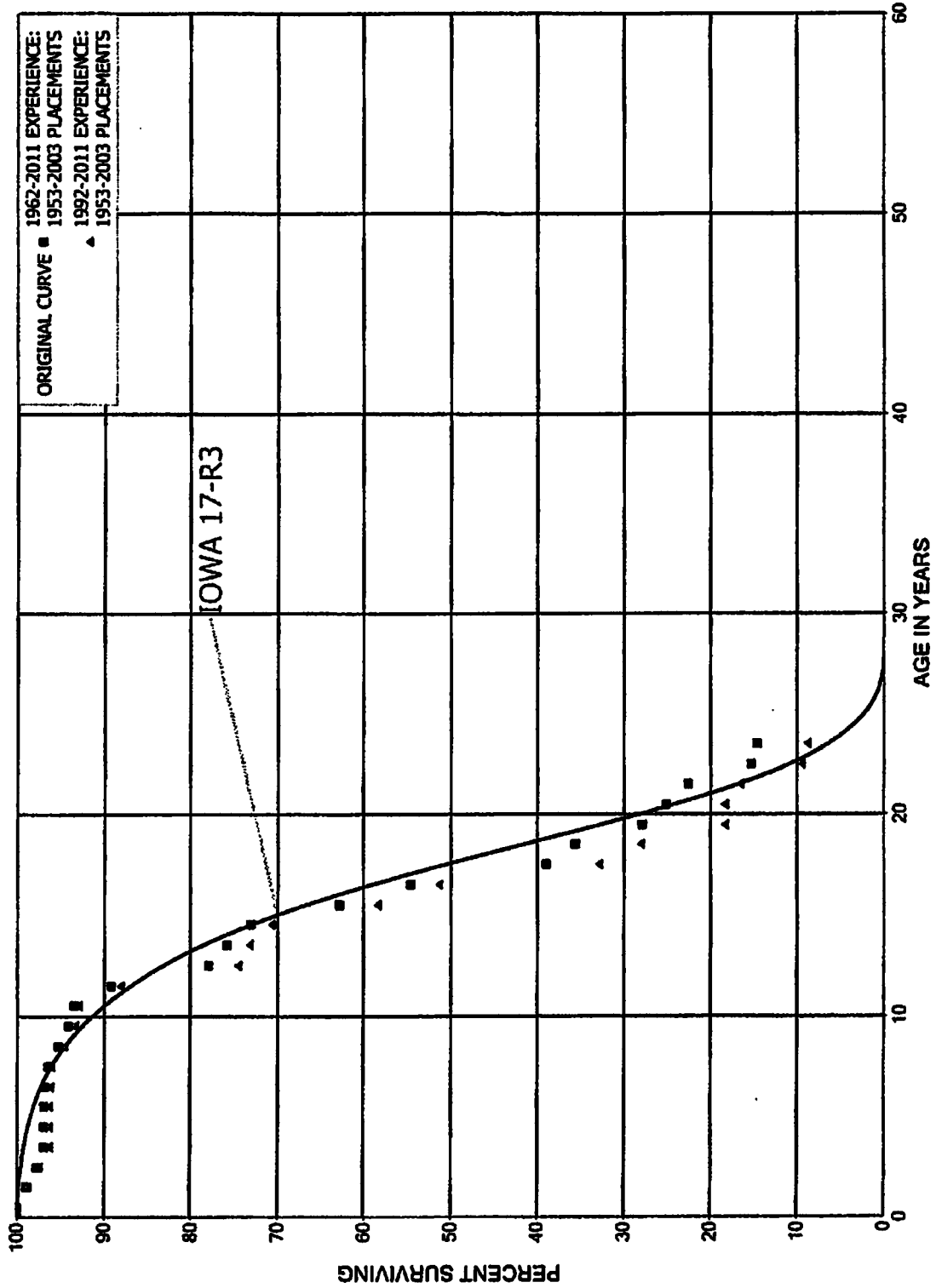
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 396 POWER OPERATED EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1965-2011			EXPERIENCE BAND 1987-2011		
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	1,960		0.0000	1.0000	17.51
40.5	1,960		0.0000	1.0000	17.51
41.5	1,413		0.0000	1.0000	17.51
42.5					17.51

COLUMBIA GAS OF PENNSYLVANIA, INC.  
 ACCOUNT 397.5 COMMUNICATION EQUIPMENT - TELEMETERING  
 ORIGINAL AND SMOOTH SURVIVOR CURVES



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 397.5 COMMUNICATION EQUIPMENT - TELEMETERING

ORIGINAL LIFE TABLE

PLACEMENT BAND 1953-2003			EXPERIENCE BAND 1962-2011			
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	2,266,265		0.0000	1.0000	100.00	
0.5	2,266,394	24,817	0.0109	0.9891	100.00	
1.5	2,220,321	25,461	0.0115	0.9885	98.91	
2.5	1,953,043	19,252	0.0099	0.9901	97.77	
3.5	1,937,301		0.0000	1.0000	96.81	
4.5	1,955,183	398	0.0002	0.9998	96.81	
5.5	1,563,806	588	0.0004	0.9996	96.79	
6.5	1,558,951	4,945	0.0032	0.9968	96.75	
7.5	1,570,021	20,188	0.0129	0.9871	96.44	
8.5	1,559,372	18,408	0.0118	0.9882	95.20	
9.5	1,432,382	10,809	0.0075	0.9925	94.08	
10.5	1,304,376	58,709	0.0450	0.9550	93.37	
11.5	1,005,959	126,457	0.1257	0.8743	89.17	
12.5	777,620	21,469	0.0276	0.9724	77.96	
13.5	749,814	27,550	0.0367	0.9633	75.81	
14.5	676,738	94,330	0.1394	0.8606	73.02	
15.5	391,767	51,377	0.1311	0.8689	62.84	
16.5	310,487	89,312	0.2877	0.7123	54.60	
17.5	221,175	18,365	0.0830	0.9170	38.90	
18.5	202,810	44,395	0.2189	0.7811	35.67	
19.5	158,415	16,014	0.1011	0.8989	27.86	
20.5	142,401	14,422	0.1013	0.8987	25.04	
21.5	127,978	40,773	0.3186	0.6814	22.51	
22.5	87,206	3,924	0.0450	0.9550	15.34	
23.5	83,281	5,256	0.0631	0.9369	14.65	
24.5	78,026	21,170	0.2713	0.7287	13.72	
25.5	56,856	23,255	0.4090	0.5910	10.00	
26.5	33,601	397	0.0118	0.9882	5.91	
27.5	33,204	3,978	0.1198	0.8802	5.84	
28.5	29,225	12,669	0.4335	0.5665	5.14	
29.5	16,557	8,428	0.5090	0.4910	2.91	
30.5	8,129	2,202	0.2709	0.7291	1.43	
31.5	5,927		0.0000	1.0000	1.04	
32.5	5,927	654	0.1104	0.8896	1.04	
33.5	5,272	175	0.0332	0.9668	0.93	
34.5	5,097		0.0000	1.0000	0.90	
35.5	5,097		0.0000	1.0000	0.90	
36.5	5,097	605	0.1187	0.8813	0.90	
37.5	4,493	121	0.0269	0.9731	0.79	
38.5	4,372		0.0000	1.0000	0.77	

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 397.5 COMMUNICATION EQUIPMENT - TELEMETERING

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1953-2003			EXPERIENCE BAND 1962-2011		
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	4,372	45	0.0102	0.9898	0.77
40.5	4,327	2,211	0.5108	0.4892	0.76
41.5	2,117	1,425	0.6731	0.3269	0.37
42.5	692		0.0000	1.0000	0.12
43.5	692		0.0000	1.0000	0.12
44.5	692	692	1.0000		0.12
45.5					

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 397.5 COMMUNICATION EQUIPMENT - TELEMETERING

ORIGINAL LIFE TABLE

PLACEMENT BAND 1953-2003			EXPERIENCE BAND 1992-2011		
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	1,756,085		0.0000	1.0000	100.00
0.5	1,793,086	24,817	0.0138	0.9862	100.00
1.5	1,813,526	25,461	0.0140	0.9860	98.62
2.5	1,563,388	19,252	0.0123	0.9877	97.23
3.5	1,585,913		0.0000	1.0000	96.03
4.5	1,621,505		0.0000	1.0000	96.03
5.5	1,330,365	588	0.0004	0.9996	96.03
6.5	1,329,777	1,446	0.0011	0.9989	95.99
7.5	1,344,575	20,188	0.0150	0.9850	95.89
8.5	1,330,588	17,231	0.0130	0.9870	94.45
9.5	1,229,293	6,707	0.0055	0.9945	93.22
10.5	1,110,455	57,168	0.0515	0.9485	92.72
11.5	813,580	125,382	0.1541	0.8459	87.94
12.5	600,895	10,410	0.0173	0.9827	74.39
13.5	584,148	20,887	0.0358	0.9642	73.10
14.5	517,734	89,984	0.1738	0.8262	70.49
15.5	237,109	28,778	0.1214	0.8786	58.24
16.5	182,353	65,714	0.3604	0.6396	51.17
17.5	121,895	18,365	0.1507	0.8493	32.73
18.5	124,429	43,275	0.3478	0.6522	27.80
19.5	104,409		0.0000	1.0000	18.13
20.5	104,807	10,302	0.0983	0.9017	18.13
21.5	94,504	40,773	0.4314	0.5686	16.35
22.5	54,156	3,924	0.0725	0.9275	9.29
23.5	50,232	5,256	0.1046	0.8954	8.62
24.5	44,976	20,899	0.4647	0.5353	7.72
25.5	24,077	23,255	0.9659	0.0341	4.13
26.5	1,476	397	0.2690	0.7310	0.14
27.5	1,429		0.0000	1.0000	0.10
28.5	1,429	600	0.4198	0.5802	0.10
29.5	829		0.0000	1.0000	0.06
30.5	1,434		0.0000	1.0000	0.06
31.5	1,555		0.0000	1.0000	0.06
32.5	1,555	654	0.4208	0.5792	0.06
33.5	945	175	0.1852	0.8148	0.03
34.5	2,504		0.0000	1.0000	0.03
35.5	4,405		0.0000	1.0000	0.03
36.5	4,405	605	0.1373	0.8627	0.03
37.5	3,801	121	0.0318	0.9682	0.02
38.5	4,372		0.0000	1.0000	0.02



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 397.5 COMMUNICATION EQUIPMENT - TELEMETERING

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1953-2003			EXPERIENCE BAND 1992-2011		
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	4,372	45	0.0102	0.9898	0.02
40.5	4,327	2,211	0.5108	0.4892	0.02
41.5	2,117	1,425	0.6731	0.3269	0.01
42.5	692		0.0000	1.0000	0.00
43.5	692		0.0000	1.0000	0.00
44.5	692	692	1.0000		0.00
45.5					

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**PART VII. DETAILED DEPRECIATION  
CALCULATIONS**

**CUMULATIVE DEPRECIATED ORIGINAL COST**

COLUMBIA GAS OF PENNSYLVANIA, INC.

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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)		
1883	866	866				0.0
1884	2,319	2,319				0.0
1885	952	952				0.0
1886	9,401	9,401				0.0
1887	4,690	4,690				0.0
1888	6,580	6,572		8	8	0.0
1889	6,551	6,535		16	24	0.0
1890	1,701	1,694		7	31	0.0
1891	8,350	8,305		45	76	0.0
1892	1,355	1,345		10	86	0.0
1893	674	668		6	92	0.0
1894	2,228	2,212		16	108	0.0
1895	1,133	1,121		12	120	0.0
1896	4,261	4,211		50	170	0.0
1897	2,268	2,238		30	200	0.0
1898	1,634	1,610		24	224	0.0
1899	934	920		14	238	0.0
1900	8,185	8,043		142	380	0.0
1901	22,577	20,782	1,795		2,175	0.0
1902	7,458	7,288		170	2,345	0.0
1903	15,706	15,315		391	2,736	0.0
1904	9,007	8,690		317	3,053	0.0
1905	13,499	13,110		389	3,442	0.0
1906	5,827	5,671		156	3,598	0.0
1907	4,319	4,197		122	3,720	0.0
1908	5,095	4,941		154	3,874	0.0
1909	5,578	5,402		176	4,050	0.0
1910	945	913		32	4,082	0.0
1911	2,449	2,247		202	4,284	0.0
1912	1,678	1,608		70	4,354	0.0
1913	8,183	7,161	1,022		5,376	0.0
1914	6,735	6,443		292	5,668	0.0
1915	9,708	9,223		485	6,153	0.0
1916	2,190	2,094		96	6,249	0.0
1917	4,268	3,936		332	6,581	0.0
1918	2,255	2,200		55	6,636	0.0
1919	2,153	2,110		43	6,679	0.0
1920	3,396	3,115		281	6,960	0.0
1921	24,693	19,910	4,783		11,743	0.0
1922	9,798	9,312		486	12,229	0.0
1923	33,049	27,741	5,308		17,537	0.0
1924	62,234	49,767	12,467		30,004	0.0
1925	54,998	45,819	9,179		39,183	0.0
1926	56,054	45,957	10,097		49,280	0.0
1927	31,597	27,087	4,510		53,790	0.0

COLUMBIA GAS OF PENNSYLVANIA, INC.

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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)		
1928	36,795	31,401	5,394		59,184	0.0
1929	70,283	58,390	11,893		71,077	0.0
1930	26,070	21,972	4,098		75,175	0.0
1931	18,109	15,165	2,944		78,119	0.0
1932	11,784	9,824	1,960		80,079	0.0
1933	23,968	19,660	4,308		84,387	0.0
1934	32,057	26,007	6,050		90,437	0.0
1935	35,489	27,692	7,797		98,234	0.0
1936	49,873	39,593	10,280		108,514	0.0
1937	75,027	60,111	14,916		123,430	0.0
1938	74,245	60,852	13,393		136,823	0.0
1939	233,832	182,704	51,128		187,951	0.0
1940	144,503	114,905	29,598		217,549	0.0
1941	196,845	154,917	41,928		259,477	0.0
1942	118,755	95,844	22,911		282,388	0.0
1943	67,500	54,210	13,290		295,678	0.0
1944	33,979	28,348	5,631		301,309	0.0
1945	30,668	25,128	5,540		306,849	0.0
1946	151,561	119,100	32,461		339,310	0.0
1947	137,058	110,437	26,621		365,931	0.0
1948	327,793	257,844	69,949		435,880	0.0
1949	819,863	630,945	188,918		624,798	0.0
1950	1,280,907	982,115	298,792		923,590	0.1
1951	1,064,341	821,826	242,515		1,166,105	0.1
1952	2,246,761	1,685,766	560,995		1,727,100	0.1
1953	1,575,216	1,193,068	382,148		2,109,248	0.1
1954	1,931,273	1,463,516	467,757		2,577,005	0.2
1955	4,493,338	3,323,736	1,169,602		3,746,607	0.2
1956	2,898,378	2,123,300	775,078		4,521,685	0.3
1957	3,795,908	2,798,333	997,575		5,519,260	0.4
1958	4,524,789	3,321,668	1,203,121		6,722,381	0.4
1959	3,815,840	2,772,433	1,043,407		7,765,788	0.5
1960	4,204,435	3,031,912	1,172,523		8,938,311	0.6
1961	4,420,468	3,197,554	1,222,914		10,161,225	0.7
1962	4,048,354	2,885,568	1,162,786		11,324,011	0.7
1963	4,954,424	3,520,834	1,433,590		12,757,601	0.8
1964	5,074,350	3,589,073	1,485,277		14,242,878	0.9
1965	4,237,944	2,988,600	1,249,344		15,492,222	1.0
1966	5,882,010	4,120,033	1,761,977		17,254,199	1.1
1967	5,657,657	3,942,771	1,714,886		18,969,085	1.2
1968	4,894,027	3,296,397	1,597,630		20,566,715	1.3
1969	4,419,103	2,866,398	1,552,705		22,119,420	1.4
1970	4,194,913	3,024,776	1,170,137		23,289,557	1.5
1971	6,245,035	4,093,506	2,151,529		25,441,086	1.7
1972	3,760,491	2,258,677	1,501,814		26,942,900	1.8

COLUMBIA GAS OF PENNSYLVANIA, INC.

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2016

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST		PCT OF COL 4 TOTAL (6)
			AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	
1973	4,315,913	2,130,762	2,185,151	29,128,051	1.9
1974	3,567,113	1,506,672	2,060,441	31,188,492	2.0
1975	3,726,918	1,578,041	2,148,877	33,337,369	2.2
1976	3,979,634	2,085,015	1,894,619	35,231,988	2.3
1977	8,245,232	4,341,399	3,903,833	39,135,821	2.6
1978	7,687,934	3,949,828	3,738,106	42,873,927	2.8
1979	9,437,367	4,802,563	4,634,804	47,508,731	3.1
1980	12,639,201	6,477,861	6,161,340	53,670,071	3.5
1981	14,861,127	7,467,097	7,394,030	61,064,101	4.0
1982	13,828,585	6,668,197	7,160,388	68,224,489	4.4
1983	11,301,570	5,397,325	5,904,245	74,128,734	4.8
1984	12,991,951	6,079,928	6,912,023	81,040,757	5.3
1985	13,056,972	6,090,923	6,966,049	88,006,806	5.7
1986	14,595,160	6,684,292	7,910,868	95,917,674	6.3
1987	15,090,490	6,897,012	8,193,478	104,111,152	6.8
1988	17,533,889	7,772,830	9,761,059	113,872,211	7.4
1989	16,711,131	7,370,661	9,340,470	123,212,681	8.0
1990	15,097,534	6,537,585	8,559,949	131,772,630	8.6
1991	14,970,251	6,497,252	8,472,999	140,245,629	9.1
1992	16,614,535	6,936,669	9,677,866	149,923,495	9.8
1993	17,814,301	7,300,483	10,513,818	160,437,313	10.5
1994	21,097,520	8,292,393	12,805,127	173,242,440	11.3
1995	21,244,587	8,457,989	12,786,598	186,029,038	12.1
1996	22,193,871	8,621,240	13,572,631	199,601,669	13.0
1997	24,675,712	9,038,511	15,637,201	215,238,870	14.0
1998	22,807,535	8,056,807	14,750,728	229,989,598	15.0
1999	21,932,584	7,176,008	14,756,576	244,746,174	16.0
2000	22,199,634	7,450,407	14,749,227	259,495,401	16.9
2001	22,642,817	6,808,920	15,833,897	275,329,298	17.9
2002	18,298,382	5,389,817	12,908,565	288,237,863	18.8
2003	22,659,037	6,303,949	16,355,088	304,592,951	19.9
2004	32,907,367	7,985,675	24,921,692	329,514,643	21.5
2005	37,204,695	7,913,282	29,291,413	358,806,056	23.4
2006	28,360,548	6,207,516	22,153,032	380,959,088	24.8
2007	57,176,326	10,291,449	46,884,877	427,843,965	27.9
2008	81,859,551	13,347,583	68,511,968	496,355,933	32.4
2009	56,751,298	8,639,160	48,112,138	544,468,071	35.5
2010	71,447,842	9,602,552	61,845,290	606,313,361	39.5
2011	129,859,884	18,853,065	111,006,819	717,320,180	46.8
2012	141,724,573	15,072,698	126,651,875	843,972,055	55.0
2013	168,018,757	12,932,281	155,086,476	999,058,531	65.1
2014	190,531,526	11,464,619	179,066,907	1,178,125,438	76.8

COLUMBIA GAS OF PENNSYLVANIA, INC.

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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)		
2015	170,076,072	6,559,644	163,516,428		1,341,641,866	87.4
2016	195,173,693	2,553,786	192,619,907		1,534,261,773	100.0
<b>SUBTOTAL</b>	<b>1,921,716,172</b>	<b>387,454,395</b>	<b>1,534,261,777</b>			
<b>AMORTIZABLE PLANT</b>	<b>30,441,051</b>	<b>7,987,822</b>	<b>22,453,229</b>			
<b>NONDEPRECIABLE PLANT</b>	<b>172,413</b>	<b>-</b>	<b>172,413</b>			
<b>TOTAL</b>	<b>1,952,329,637</b>	<b>395,442,217</b>	<b>1,556,887,419</b>			

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## UTILITY PLANT IN SERVICE



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 350.2 RIGHTS-OF-WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. SQUARE						
PROBABLE RETIREMENT YEAR.. 6-2025						
NET SALVAGE PERCENT.. 0						
1972	1,896.43	1,589	1,895	1	8.58	
1973	35.65	30	36			
	1,932.08	1,619	1,931	1		

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 0.0 0.00

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 351.2 COMPRESSOR STATION STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. IOWA 65-R2.5						
PROBABLE RETIREMENT YEAR.. 6-2025						
NET SALVAGE PERCENT.. 0						
1970	124,246.77	104,289	84,603	39,644	8.07	4,913
1971	44,955.88	37,602	30,504	14,452	8.10	1,784
1972	23,833.95	19,867	16,117	7,717	8.12	950
1973	1,046.90	869	705	342	8.15	42
1996	107,318.16	76,035	61,683	45,635	8.40	5,433
1997	932.86	650	527	406	8.44	48
1998	7,804.72	5,347	4,338	3,467	8.47	409
2001	87,639.68	56,615	45,928	41,712	8.45	4,936
2003	212,167.85	130,080	105,526	106,642	8.47	12,591
2004	195,419.81	116,236	94,295	101,125	8.46	11,953
2008	673,302.63	335,507	272,177	401,126	8.47	47,358
2009	4,140.12	1,931	1,567	2,573	8.48	303
2010	4,750.10	2,045	1,659	3,091	8.49	364
2012	59,116.96	20,236	16,416	42,701	8.49	5,030
2013	744,499.18	213,671	173,339	571,160	8.49	67,274
2014	847,776.27	187,867	152,405	695,371	8.49	81,905
2015	51,937.15	7,448	6,042	45,895	8.46	5,425
	3,190,888.99	1,316,295	1,067,831	2,123,058		250,718

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 8.5 7.86

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 352 WELLS - CONSTRUCTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. SQUARE						
PROBABLE RETIREMENT YEAR.. 6-2025						
NET SALVAGE PERCENT.. 0						
1970	326,259.85	275,363	326,260			
1971	246,359.45	207,215	246,359			
1972	166,322.06	139,396	166,322			
1978	60,192.37	49,200	60,177	15	8.58	2
	799,133.73	671,174	799,118	16		2
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					8.0	0.00

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 352 WELLS - EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. IOWA 45-S2.5						
PROBABLE RETIREMENT YEAR.. 6-2025						
NET SALVAGE PERCENT.. 0						
1970	62,707.48	53,675	62,707			
1971	61,403.78	52,370	61,404			
1972	42,286.87	35,931	42,287			
1978	2,281.54	1,937	2,282			
	168,679.67	143,913	168,680			
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						0.0 0.00

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 352.1 STORAGE LEASEHOLDS AND RIGHTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. SQUARE						
PROBABLE RETIREMENT YEAR.. 6-2025						
NET SALVAGE PERCENT.. 0						
1970	206,940.78	174,658	206,932	9	8.58	1
	206,940.78	174,658	206,932	9		1
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						9.0 0.00

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 353 LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. IOWA 50-S1.5						
PROBABLE RETIREMENT YEAR.. 6-2025						
NET SALVAGE PERCENT.. 0						
1971	260,327.01	217,766	260,327			
1972	62,624.57	52,230	62,625			
1973	54,831.76	45,576	54,832			
1984	13,885.22	11,208	13,885			
1989	13,619.22	10,567	13,619			
	405,287.78	337,347	405,288			

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 0.0 0.00

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 354 COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL, (7)
1950	5,260.40	4,717	5,260			
1952	23,545.54	21,011	23,546			
1957	359.87	317	360			
1967	1,166.83	996	1,136	31	6.90	4
1969	2,153.76	1,824	2,081	73	7.09	10
1970	488,480.13	412,067	470,182	18,298	7.18	2,548
1971	21,130.55	17,757	20,261	870	7.26	120
1972	4,102.16	3,433	3,917	185	7.34	25
1979	1,852.48	1,539	1,756	96	7.63	13
1987	19,610.28	15,402	17,574	2,036	8.04	253
1991	11,110.96	8,415	9,602	1,509	8.14	185
1993	1,503.69	1,113	1,270	234	8.23	28
2013	280,455.02	80,771	92,162	188,293	8.45	22,283
2015	93.00	13	15	78	8.43	9
2016	45,090.00	2,345	2,676	42,414	8.35	5,080
	905,914.67	571,720	651,798	254,117		30,558

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 8.3 3.37

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 355 MEASURING AND REGULATING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. IOWA 37-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2025						
NET SALVAGE PERCENT.. 0						
1970	74,761.84	62,686	74,762			
1975	2,685.09	2,199	2,685			
1981	13,738.52	11,532	13,739			
1986	29,489.73	23,769	29,490			
1987	2,334.83	1,868	2,334			
	123,010.01	102,054	123,010			
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						0.0 0.00



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 374.4 LAND AND LAND RIGHTS - LAND RIGHTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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						
1957	2,876.82	2,170	2,011	866	15.97	54
1961	758.35	545	505	253	18.28	14
1962	297.85	211	196	102	18.89	5
1963	3,271.82	2,289	2,122	1,150	19.52	59
1964	3,447.21	2,379	2,205	1,242	20.15	62
1965	1,073.87	730	677	397	20.80	19
1966	2,235.21	1,497	1,388	847	21.46	39
1967	10,839.80	7,149	6,627	4,213	22.13	190
1968	1,895.21	1,230	1,140	755	22.82	33
1969	11,679.53	7,455	6,910	4,770	23.51	203
1970	8,198.06	5,143	4,767	3,431	24.22	142
1971	19,892.06	12,263	11,367	8,525	24.93	342
1972	11,238.42	6,804	6,307	4,931	25.65	192
1973	5,303.83	3,150	2,920	2,384	26.39	90
1974	16,184.84	9,430	8,741	7,444	27.13	274
1975	24,576.60	14,035	13,010	11,567	27.88	415
1976	23,730.97	14,483	13,425	10,306	25.81	399
1977	53,252.68	31,904	29,573	23,680	26.38	898
1978	20,741.77	12,192	11,301	9,441	26.94	350
1979	35,849.18	20,656	19,147	16,702	27.52	607
1980	22,588.88	12,668	11,742	10,847	28.52	380
1981	39,329.13	21,592	20,014	19,315	29.10	664
1982	61,997.31	33,286	30,854	31,143	29.69	1,049
1983	39,667.42	20,810	19,290	20,377	30.28	673
1984	44,218.36	22,503	20,859	23,359	31.28	747
1985	65,269.15	32,400	30,033	35,236	31.87	1,106
1986	39,835.37	19,264	17,856	21,979	32.48	677
1987	63,255.83	29,775	27,599	35,657	33.08	1,078
1988	97,951.38	44,538	41,284	56,667	34.08	1,663
1989	130,069.87	57,413	53,218	76,852	34.70	2,215
1990	83,426.74	35,707	33,098	50,329	35.31	1,425
1991	48,905.40	20,139	18,668	30,237	36.31	833
1992	13,380.44	5,325	4,936	8,444	36.93	229
1993	43,071.09	16,539	15,331	27,740	37.56	739
1994	35,111.07	12,907	11,964	23,147	38.56	600
1995	19,179.11	6,778	6,283	12,896	39.19	329
1996	45,823.89	15,530	14,395	31,429	39.83	789
1997	41,178.42	13,272	12,302	28,876	40.83	707
1998	9,151.12	2,815	2,609	6,542	41.46	158
1999	6,008.79	1,748	1,620	4,389	42.46	103
2000	14,178.19	3,910	3,624	10,554	43.11	245
2001	14,570.19	3,796	3,519	11,051	43.76	253

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 374.4 LAND AND LAND RIGHTS - LAND RIGHTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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						
2002	3,019.71	736	682	2,338	44.76	52
2003	43,575.41	9,940	9,214	34,361	45.41	757
2004	76,890.08	16,231	15,045	61,845	46.41	1,333
2005	26,743.57	5,220	4,839	21,905	47.06	465
2006	37,310.03	6,686	6,197	31,113	47.72	652
2007	66,894.74	10,837	10,045	56,850	48.72	1,167
2008	28,099.19	4,091	3,792	24,307	49.39	492
2009	92,620.99	11,948	11,075	81,546	50.06	1,629
2010	112,091.08	12,509	11,595	100,496	51.06	1,968
2011	76,519.13	7,254	6,724	69,795	51.73	1,349
2012	218,249.85	16,958	15,719	202,531	52.40	3,865
2013	191,889.02	11,609	10,761	181,128	53.08	3,412
2014	89,833.56	3,863	3,581	86,253	53.76	1,604
2015	57,608.85	1,463	1,356	56,253	54.45	1,033
2016	227,996.00	1,915	1,775	226,221	54.19	4,175
	2,584,852.44	709,690	657,837	1,927,015		45,002
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						42.8 1.74

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 374.5 LAND AND LAND RIGHTS - RIGHTS-OF-WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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 75-S4						
NET SALVAGE PERCENT.. 0						
1883	866.25	866	866			
1884	2,319.40	2,319	2,319			
1885	952.00	952	952			
1886	9,401.15	9,396	9,401			
1887	4,690.00	4,656	4,690			
1888	6,579.75	6,488	6,572	8	1.04	8
1889	6,551.18	6,452	6,535	16	1.14	14
1890	1,679.50	1,652	1,673	6	1.23	5
1891	8,350.23	8,199	8,305	45	1.36	33
1892	1,354.95	1,328	1,345	10	1.47	7
1893	650.85	637	645	6	1.54	4
1894	1,616.78	1,581	1,601	16	1.65	10
1895	1,133.20	1,107	1,121	12	1.75	7
1896	4,260.56	4,157	4,211	50	1.83	27
1897	2,267.65	2,209	2,238	30	1.94	15
1898	1,633.73	1,589	1,610	24	2.05	12
1899	934.25	908	920	14	2.14	7
1900	8,185.42	7,940	8,043	142	2.25	63
1901	15,227.76	14,749	14,940	288	2.36	122
1902	7,330.74	7,090	7,182	149	2.46	61
1903	15,446.32	14,915	15,108	338	2.58	131
1904	8,443.31	8,139	8,244	199	2.70	74
1905	13,211.32	12,718	12,882	329	2.80	118
1906	5,826.89	5,599	5,671	156	2.93	53
1907	4,318.72	4,143	4,197	122	3.05	40
1908	5,084.82	4,870	4,933	152	3.17	48
1909	5,578.23	5,333	5,402	176	3.30	53
1910	944.58	901	913	32	3.44	9
1911	1,805.52	1,720	1,742	64	3.57	18
1912	1,590.08	1,511	1,531	59	3.71	16
1913	4,199.64	3,984	4,036	164	3.85	43
1914	6,522.34	6,175	6,255	267	3.99	67
1915	9,299.36	8,786	8,900	399	4.14	96
1916	2,133.53	2,011	2,037	97	4.30	23
1917	2,947.27	2,772	2,808	139	4.45	31
1918	969.85	910	922	48	4.62	10
1919	713.16	668	677	36	4.79	8
1920	1,116.43	1,043	1,056	60	4.95	12
1921	2,386.50	2,223	2,252	134	5.13	26
1922	5,478.84	5,090	5,156	323	5.32	61
1923	5,748.64	5,327	5,396	353	5.50	64
1924	2,962.36	2,737	2,772	190	5.70	33

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 374.5 LAND AND LAND RIGHTS - RIGHTS-OF-WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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 75-S4						
NET SALVAGE PERCENT.. 0						
1925	8,085.67	7,450	7,546	540	5.90	92
1926	3,690.49	3,390	3,434	256	6.11	42
1927	3,441.21	3,151	3,192	249	6.33	39
1928	3,616.30	3,300	3,343	273	6.55	42
1929	9,736.71	8,857	8,972	765	6.78	113
1930	3,705.73	3,359	3,402	304	7.02	43
1931	4,695.61	4,240	4,295	401	7.27	55
1932	2,031.20	1,827	1,851	180	7.53	24
1933	2,540.95	2,277	2,306	235	7.79	30
1934	4,020.82	3,588	3,634	387	8.07	48
1935	866.62	770	780	87	8.36	10
1936	4,994.63	4,418	4,475	520	8.66	60
1937	3,607.79	3,176	3,217	391	8.97	44
1938	1,245.49	1,091	1,105	140	9.29	15
1939	956.06	833	844	112	9.62	12
1940	13,850.45	12,009	12,164	1,686	9.97	169
1941	4,887.61	4,214	4,268	620	10.33	60
1942	8,169.68	7,003	7,094	1,076	10.71	100
1943	1,693.42	1,443	1,462	231	11.10	21
1944	3,627.62	3,071	3,111	517	11.51	45
1945	1,007.81	847	858	150	11.93	13
1946	623.85	521	528	96	12.38	8
1947	215.02	178	180	35	12.83	3
1948	3,109.38	2,558	2,591	518	13.31	39
1949	16,198.32	13,216	13,387	2,811	13.81	204
1950	20,944.17	16,945	17,164	3,780	14.32	264
1951	11,956.42	9,587	9,711	2,245	14.86	151
1952	8,038.39	6,387	6,470	1,568	15.41	102
1953	5,949.87	4,681	4,742	1,208	15.99	76
1954	21,585.01	16,810	17,027	4,558	16.59	275
1955	32,149.56	24,772	25,092	7,058	17.21	410
1956	51,558.51	39,288	39,796	11,763	17.85	659
1957	19,916.61	14,999	15,193	4,724	18.52	255
1958	63,499.25	47,243	47,854	15,645	19.20	815
1959	28,371.09	20,839	21,108	7,263	19.91	365
1960	26,305.63	19,066	19,313	6,993	20.64	339
1961	15,768.03	11,271	11,417	4,351	21.39	203
1962	18,087.78	12,743	12,908	5,180	22.16	234
1963	27,374.57	18,998	19,244	8,131	22.95	354
1964	40,027.79	27,347	27,701	12,327	23.76	519
1965	17,574.04	11,812	11,965	5,609	24.59	228
1966	18,597.25	12,289	12,448	6,149	25.44	242

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 374.5 LAND AND LAND RIGHTS - RIGHTS-OF-WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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 75-S4						
NET SALVAGE PERCENT.. 0						
1967	96,910.77	62,914	63,727	33,184	26.31	1,261
1968	82,637.79	52,679	53,360	29,278	27.19	1,077
1969	46,057.56	28,808	29,181	16,877	28.09	601
1970	45,097.36	27,660	28,018	17,079	29.00	589
1971	54,600.87	32,819	33,243	21,358	29.92	714
1972	80,822.88	47,578	48,193	32,630	30.85	1,058
1973	31,060.02	17,891	18,122	12,938	31.80	407
1974	42,716.26	24,063	24,374	18,342	32.75	560
1975	53,203.52	29,283	29,662	23,542	33.72	698
1976	46,796.87	25,911	26,246	20,551	32.58	631
1977	50,016.13	27,009	27,358	22,658	33.58	675
1978	27,600.77	14,634	14,823	12,778	34.04	375
1979	28,379.92	14,655	14,845	13,535	35.04	386
1980	24,054.08	12,090	12,246	11,808	36.04	328
1981	55,235.53	26,999	27,348	27,888	37.04	753
1982	47,534.94	22,579	22,871	24,664	38.04	648
1983	27,148.25	12,521	12,683	14,465	39.04	371
1984	30,306.87	13,559	13,734	16,573	40.04	414
1985	72,105.59	31,265	31,669	40,437	41.04	985
1986	17,533.91	7,361	7,456	10,078	42.04	240
1987	27,416.83	11,131	11,275	16,142	43.04	375
1988	11,339.22	4,447	4,505	6,834	44.04	155
1989	70,082.23	26,519	26,862	43,220	45.04	960
1990	44,760.66	16,320	16,531	28,230	46.04	613
1991	35,224.46	12,357	12,517	22,707	47.04	483
1992	54,141.31	18,246	18,482	35,659	48.04	742
1993	58,993.43	19,067	19,314	39,679	49.04	809
1994	184,531.84	57,094	57,832	126,700	50.04	2,532
1995	584,928.49	172,905	175,141	409,787	51.04	8,029
1996	126,940.88	35,772	36,234	90,707	52.04	1,743
1997	68,030.65	18,232	18,468	49,563	53.04	934
1998	40,132.45	10,202	10,334	29,798	54.04	551
2000	15,568.19	3,528	3,574	11,994	56.04	214
2001	39,714.12	8,451	8,560	31,154	57.04	546
2002	181,571.19	36,133	36,600	144,971	58.04	2,498
2003	1,938.28	359	364	1,574	59.04	27
2006	3,432.18	494	500	2,932	62.04	47
	3,239,601.77	1,581,249	1,601,503	1,638,099		42,280

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 38.7 1.31

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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-R1.5						
NET SALVAGE PERCENT.. 0						
1922	212.37	186	188	24	7.31	3
1925	163.65	142	143	21	8.12	3
1927	179.72	154	155	25	8.68	3
1928	453.35	386	389	64	8.97	7
1929	3,692.89	3,124	3,151	542	9.25	59
1930	3,760.82	3,162	3,189	572	9.55	60
1931	1,023.79	856	863	161	9.84	16
1932	2,103.09	1,748	1,763	340	10.14	34
1933	4,849.88	4,005	4,039	811	10.45	78
1934	1,883.34	1,546	1,559	324	10.75	30
1935	83.76	68	69	15	11.06	1
1936	2,187.29	1,772	1,787	400	11.38	35
1938	545.08	436	440	105	12.03	9
1939	7,306.53	5,801	5,851	1,456	12.36	118
1940	494.47	390	393	101	12.70	8
1941	805.02	630	635	170	13.04	13
1942	1,158.94	900	908	251	13.39	19
1943	679.40	524	528	151	13.75	11
1945	584.10	443	447	137	14.48	9
1946	939.24	707	713	226	14.86	15
1947	2,549.41	1,901	1,917	632	15.25	41
1948	6,200.94	4,585	4,624	1,577	15.64	101
1949	1,071.72	785	792	280	16.04	17
1950	4,686.56	3,402	3,431	1,256	16.45	76
1951	11,501.28	8,267	8,338	3,163	16.87	187
1952	34,500.92	24,553	24,763	9,738	17.30	563
1953	27,498.16	19,372	19,537	7,961	17.73	449
1954	21,214.70	14,787	14,913	6,302	18.18	347
1955	15,083.86	10,400	10,489	4,595	18.63	247
1956	41,463.22	28,271	28,512	12,951	19.09	678
1957	81,122.57	54,677	55,144	25,979	19.56	1,328
1958	63,775.09	42,474	42,836	20,939	20.04	1,045
1959	40,972.80	26,953	27,183	13,790	20.53	672
1960	111,801.20	72,615	73,235	38,566	21.03	1,834
1961	55,858.09	35,815	36,121	19,737	21.53	917
1962	94,729.64	59,916	60,427	34,303	22.05	1,556
1963	36,129.76	22,539	22,731	13,399	22.57	594
1964	47,184.09	29,018	29,266	17,918	23.10	776
1965	30,225.19	18,316	18,472	11,753	23.64	497
1966	26,276.28	15,682	15,816	10,460	24.19	432
1967	25,537.96	15,008	15,136	10,402	24.74	420
1968	9,844.29	5,692	5,741	4,103	25.31	162

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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-R1.5						
NET SALVAGE PERCENT.. 0						
1969	17,736.43	10,086	10,172	7,564	25.88	292
1970	5,760.10	3,220	3,247	2,513	26.46	95
1971	36,404.14	19,992	20,163	16,241	27.05	600
1972	11,623.11	6,267	6,320	5,303	27.65	192
1973	14,674.20	7,765	7,831	6,843	28.25	242
1974	12,319.40	6,394	6,449	5,870	28.86	203
1975	16,502.93	8,395	8,467	8,036	29.48	273
1976	25,772.36	15,729	15,863	9,909	25.81	384
1977	22,125.92	13,256	13,369	8,757	26.38	332
1978	35,018.81	20,584	20,760	14,259	26.94	529
1979	36,947.14	21,289	21,471	15,476	27.52	562
1980	27,581.83	15,669	15,803	11,779	27.69	425
1981	27,254.61	15,154	15,283	11,972	28.28	423
1982	41,197.39	22,403	22,594	18,603	28.87	644
1983	32,646.14	17,345	17,493	15,153	29.48	514
1984	18,558.89	9,686	9,769	8,790	29.70	296
1985	12,621.67	6,424	6,479	6,143	30.31	203
1986	26,056.90	12,919	13,029	13,028	30.93	421
1987	11,133.36	5,404	5,450	5,683	31.19	182
1988	53,485.89	25,229	25,444	28,042	31.83	881
1989	30,479.01	14,039	14,159	16,320	32.11	508
1990	18,371.94	8,201	8,271	10,101	32.76	308
1991	35,415.91	15,392	15,523	19,893	33.06	602
1992	128.54	54	54	75	33.72	2
1993	23,288.39	9,488	9,569	13,719	34.06	403
1994	1,499.00	591	596	903	34.40	26
1995	13,489.18	5,114	5,158	8,331	35.08	237
1996	50,489.32	18,454	18,611	31,878	35.45	899
1997	20,428.57	7,179	7,240	13,189	35.83	368
1998	63,530.85	21,410	21,593	41,938	36.23	1,158
1999	4,513.90	1,454	1,466	3,048	36.64	83
2000	29,384.50	9,021	9,098	20,286	37.06	547
2001	30,493.43	8,886	8,962	21,531	37.49	574
2002	34,799.34	9,584	9,666	25,133	37.94	662
2003	65,625.49	17,082	17,228	48,397	38.13	1,269
2004	41,524.09	10,107	10,193	31,331	38.60	812
2005	65,809.81	14,952	15,080	50,730	38.83	1,306
2006	199,321.24	41,937	42,295	157,026	39.09	4,017
2007	170,063.18	32,992	33,273	136,790	39.13	3,496
2008	466,659.09	82,085	82,785	383,874	39.43	9,736
2009	44,402.91	7,016	7,076	37,327	39.53	944
2010	179,960.07	25,176	25,391	154,569	39.45	3,918

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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-R1.5						
NET SALVAGE PERCENT.. 0						
2011	216,994.88	26,213	26,437	190,558	39.43	4,833
2012	589,631.14	59,612	60,120	529,511	39.25	13,491
2013	310,508.68	25,151	25,366	285,143	38.78	7,353
2014	354,418.88	21,230	21,411	333,008	37.91	8,784
2015	374,863.46	14,057	14,177	360,686	36.32	9,931
2016	362,756.00	5,042	5,085	357,671	32.54	10,992
	5,106,606.48	1,316,737	1,327,973	3,778,633		108,422
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						34.9 2.12



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.6 STRUCTURES AND IMPROVEMENTS - INDUSTRIAL MEASURING AND  
REGULATING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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-R1.5						
NET SALVAGE PERCENT.. 0						
1922	114.31	110	114			
1928	87.15	81	87			
1930	127.57	117	128			
1931	263.40	240	263			
1934	783.68	703	784			
1935	147.25	131	147			
1936	21.46	19	21			
1937	618.76	546	619			
1938	1,463.03	1,283	1,463			
1940	440.04	381	440			
1942	1,018.37	871	1,018			
1944	2,850.41	2,403	2,810	40	7.84	5
1946	377.07	313	366	11	8.43	1
1947	568.77	469	548	21	8.73	2
1948	482.71	395	462	21	9.04	2
1950	1,857.60	1,498	1,752	106	9.68	11
1951	3,131.90	2,506	2,930	202	10.00	20
1952	3,969.07	3,149	3,682	287	10.33	28
1953	4,259.74	3,351	3,918	342	10.67	32
1955	4,904.63	3,789	4,431	474	11.37	42
1956	2,507.83	1,919	2,244	264	11.73	23
1957	14,375.38	10,894	12,739	1,636	12.11	135
1958	1,667.93	1,251	1,463	205	12.49	16
1959	5,902.55	4,383	5,125	778	12.87	60
1960	1,345.00	988	1,155	190	13.27	14
1961	1,954.81	1,420	1,660	295	13.68	22
1963	3,416.99	2,424	2,834	583	14.53	40
1964	1,441.97	1,010	1,181	261	14.97	17
1967	1,614.49	1,087	1,271	343	16.35	21
1970	2,450.11	1,577	1,844	606	17.82	34
1971	7,721.50	4,889	5,717	2,004	18.34	109
1972	1.00	1	1			
1980	3,885.67	2,490	2,912	974	20.40	48
1988	11,897.69	6,424	7,512	4,386	24.22	181
	87,669.84	63,112	73,641	14,029		863

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.3 0.98

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM  
STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
<b>GETTYSBURG GARAGE</b>						
INTERIM SURVIVOR CURVE.. IOWA 90-R1						
PROBABLE RETIREMENT YEAR.. 6-2007						
NET SALVAGE PERCENT.. 0						
1934	778.19	778	778			
1955	80.00	80	80			
1957	860.20	860	860			
1971	1,426.78	1,427	1,427			
	3,145.17	3,145	3,145			
<b>WARREN SERVICE CENTER</b>						
INTERIM SURVIVOR CURVE.. IOWA 90-R1						
PROBABLE RETIREMENT YEAR.. 6-2033						
NET SALVAGE PERCENT.. 0						
1958	18,578.51	14,077	15,783	2,795	15.43	181
1959	433.43	327	367	67	15.45	4
1978	1,675.90	1,191	1,335	341	15.64	22
1985	19,261.55	12,828	14,383	4,879	15.75	310
1987	7,412.28	4,840	5,427	1,986	15.63	127
1995	7,987.28	4,601	5,159	2,829	15.76	180
1998	14,349.25	7,743	8,682	5,668	15.71	361
1999	5,121.39	2,685	3,010	2,111	15.81	134
2003	16,873.40	7,765	8,706	8,167	15.74	519
2007	4,507.15	1,689	1,894	2,613	15.71	166
2010	1,378.04	401	450	928	15.61	59
2012	15,826.31	3,502	3,926	11,900	15.54	766
2014	1,810.04	247	277	1,533	15.31	100
2015	239,119.80	20,516	23,003	216,117	15.09	14,322
2016	142,175.00	4,379	4,910	137,265	14.42	9,519
	496,509.33	86,791	97,311	399,198		26,770
<b>WASHINGTON SERVICE CENTER</b>						
INTERIM SURVIVOR CURVE.. IOWA 90-R1						
PROBABLE RETIREMENT YEAR.. 6-2030						
NET SALVAGE PERCENT.. 0						
1955	7,697.97	6,155	6,901	797	12.77	62
1957	15,810.71	12,567	14,090	1,720	12.80	134
1958	970.12	769	862	108	12.82	8

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM  
STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
WASHINGTON SERVICE CENTER						
INTERIM SURVIVOR CURVE.. IOWA 90-R1						
PROBABLE RETIREMENT YEAR.. 6-2030						
NET SALVAGE PERCENT.. 0						
1962	251.75	197	221	31	12.88	2
1963	15,731.04	12,254	13,739	1,992	12.89	155
1964	74,735.67	57,998	65,028	9,708	12.90	753
1965	2,068.02	1,598	1,792	276	12.92	21
1968	433.80	331	371	63	12.96	5
1969	810.82	616	691	120	12.97	9
1973	1,110.79	827	927	184	13.01	14
1976	1,916.59	1,449	1,625	292	13.06	22
1978	1,642.04	1,230	1,379	263	12.87	20
1982	1,077.99	783	878	200	12.98	15
1984	4,631.57	3,303	3,703	928	13.04	71
1985	887.69	628	704	184	13.03	14
1987	176,252.14	122,354	137,185	39,068	12.96	3,015
1995	191,700.92	119,065	133,497	58,204	13.07	4,453
1996	41,126.48	25,108	28,151	12,975	13.03	996
1997	50,473.01	30,183	33,842	16,632	13.05	1,274
1998	27,492.05	16,099	18,050	9,442	13.03	725
2005	151,190.19	70,591	79,147	72,043	13.03	5,529
2006	8,764.29	3,890	4,362	4,403	13.06	337
2008	7,736.87	3,041	3,410	4,327	13.00	333
2010	85,443.94	28,239	31,662	53,782	13.00	4,137
2011	15,630.26	4,606	5,164	10,466	12.97	807
2013	101,862.52	21,371	23,961	77,901	12.87	6,053
2015	37,612.98	3,795	4,255	33,358	12.63	2,641
2016	236,962.00	8,602	9,645	227,317	12.18	18,663
	1,262,024.22	557,649	625,242	636,782		50,268

BRADFORD OFFICE

INTERIM SURVIVOR CURVE.. IOWA 90-R1  
PROBABLE RETIREMENT YEAR.. 6-2008  
NET SALVAGE PERCENT.. 0

1958	20,999.60	21,000	21,000
1959	135.56	136	136
1960	720.61	721	721
1964	300.54	301	301

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM  
STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
<b>BRADFORD OFFICE</b>						
INTERIM SURVIVOR CURVE.. IOWA 90-R1						
PROBABLE RETIREMENT YEAR.. 6-2008						
NET SALVAGE PERCENT.. 0						
1965	4,024.39	4,024	4,024			
1993	27,303.35	27,303	27,303			
1999	1,735.00	1,735	1,735			
	55,219.05	55,220	55,219			
<b>HANOVER SERVICE CENTER</b>						
INTERIM SURVIVOR CURVE.. IOWA 90-R1						
PROBABLE RETIREMENT YEAR.. 6-2029						
NET SALVAGE PERCENT.. 0						
1939	1,109.69	932	1,049	60	11.61	5
1949	321.30	265	298	23	11.79	2
1979	83,913.21	63,422	71,418	12,496	12.09	1,034
1983	5,406.31	3,975	4,476	930	12.04	77
1991	1,608.74	1,088	1,225	384	12.18	32
1992	3,057.02	2,045	2,303	754	12.08	62
1998	247,041.93	148,769	167,524	79,518	12.17	6,534
2000	1,955.70	1,124	1,266	690	12.15	57
2007	8,580.72	3,749	4,222	4,359	12.14	359
2009	8,853.89	3,362	3,786	5,068	12.12	418
2013	76,434.21	16,945	19,081	57,353	11.99	4,783
2014	4,016.07	678	763	3,253	11.91	273
2015	12,760.00	1,370	1,543	11,217	11.78	952
2016	94,787.00	3,668	4,130	90,657	11.39	7,959
	549,845.79	251,392	283,085	266,761		22,547
<b>JEANNETTE SERVICE CENTER AND SHOP</b>						
INTERIM SURVIVOR CURVE.. IOWA 90-R1						
PROBABLE RETIREMENT YEAR.. 6-2056						
NET SALVAGE PERCENT.. 0						
1981	592,575.64	306,421	345,052	247,524	33.08	7,483
1986	14,472.81	6,911	7,782	6,691	33.28	201
1987	10,647.89	5,012	5,644	5,004	33.08	151
1988	10,137.71	4,667	5,255	4,882	33.31	147
1996	15,817.88	6,008	6,765	9,052	33.34	272

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM  
STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
JEANNETTE SERVICE CENTER AND SHOP INTERIM SURVIVOR CURVE.. IOWA 90-R1 PROBABLE RETIREMENT YEAR.. 6-2056 NET SALVAGE PERCENT.. 0						
1997	7,884.72	2,894	3,259	4,626	33.49	138
1998	1,290.57	459	517	774	33.40	23
2000	2,036.59	672	757	1,280	33.33	38
2003	23,858.42	6,850	7,714	16,145	33.31	485
2006	121,821.51	29,188	32,868	88,954	33.06	2,691
2007	83,263.83	18,501	20,833	62,430	32.96	1,894
2009	23,128.35	4,288	4,829	18,300	32.58	562
2010	4,254.90	702	791	3,464	32.49	107
2013	777,783.97	76,301	85,920	691,864	31.43	22,013
2015	1,071,197.68	48,847	55,005	1,016,193	29.64	34,285
2016	284,350.00	4,749	5,348	279,002	27.01	10,330
	3,044,522.47	522,470	588,338	2,456,184		80,820

OTHER BUILDINGS  
SURVIVOR CURVE.. IOWA 33-S1  
NET SALVAGE PERCENT.. 0

1951	1.97	2	2			
1953	1,253.24	1,227	1,253			
1954	1,277.67	1,241	1,278			
1955	4,409.37	4,245	4,409			
1956	198.24	189	198			
1961	4,723.53	4,307	4,724			
1966	1,831.02	1,587	1,789	42	4.40	10
1969	1,119.73	938	1,057	62	5.35	12
1971	96,125.20	78,648	88,664	7,461	6.00	1,244
1972	8,467.01	6,843	7,714	753	6.33	119
1975	5,344.49	4,151	4,680	665	7.37	90
1976	6,219.89	5,279	5,951	269	7.20	37
1984	40,920.59	31,570	35,591	5,330	9.60	555
1985	3,107.78	2,353	2,653	455	10.08	45
1987	13,783.80	10,097	11,383	2,401	10.74	224
1988	14,302.43	10,323	11,638	2,665	10.95	243
1989	11,049.81	7,817	8,813	2,237	11.34	197
1990	31,128.77	21,544	24,288	6,841	11.75	582
1993	7,877.70	5,091	5,739	2,138	12.82	167
1994	14,735.98	9,282	10,464	4,272	13.17	324
1995	27,152.82	16,574	18,685	8,468	13.67	619

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM  
STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER BUILDINGS						
SURVIVOR CURVE.. IOWA 33-S1						
NET SALVAGE PERCENT.. 0						
1996	2,335.94	1,383	1,559	777	14.07	55
1997	1,308.40	752	848	461	14.37	32
1998	55,738.32	30,896	34,831	20,908	14.81	1,412
1999	23,230.78	12,382	13,959	9,272	15.26	608
2000	184,003.63	93,952	105,917	78,087	15.74	4,961
2001	8,913.21	4,356	4,911	4,002	16.13	248
2003	12,379.79	5,448	6,142	6,238	17.07	365
2006	1,739.04	625	705	1,034	18.57	56
2007	26,141.94	8,616	9,713	16,429	19.15	858
2008	131,679.64	39,346	44,357	87,323	19.75	4,421
2009	237,954.14	63,700	71,812	166,142	20.29	8,188
2010	11,698.35	2,747	3,097	8,602	20.91	411
2011	17,622.21	3,531	3,981	13,642	21.61	631
2012	15,538.37	2,573	2,901	12,638	22.25	568
2013	572,182.47	74,098	83,535	488,648	22.97	21,273
2014	319,832.76	29,521	33,281	286,552	23.76	12,060
2015	57,437.45	3,125	3,523	53,914	24.62	2,190
2016	189,574.00	3,355	3,782	185,792	25.45	7,300
	2,164,341.48	603,714	679,824	1,484,517		70,105
	7,575,607.51	2,080,381	2,332,164	5,243,442		250,510
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						20.9 3.31

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.8 STRUCTURES AND IMPROVEMENTS - COMMUNICATION STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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						
NET SALVAGE PERCENT.. 0						
2001	16,515.17	5,576	6,508	10,007	30.25	331
	16,515.17	5,576	6,508	10,007		331
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					30.2	2.00

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.1 MAINS - CAST IRON

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. IOWA 72-R1.5						
PROBABLE RETIREMENT YEAR.. 12-2025						
NET SALVAGE PERCENT.. 0						
1901	7,349.72	6,741	5,842	1,508	5.95	253
1902	103.93	95	82	22	6.03	4
1903	255.97	234	203	53	6.12	9
1904	563.41	515	446	117	6.20	19
1905	287.87	263	228	60	6.28	10
1908	9.88	9	8	2	6.49	
1911	643.14	583	505	138	6.69	21
1912	52.22	47	41	11	6.75	2
1913	3,967.05	3,588	3,109	858	6.81	126
1914	113.96	103	89	25	6.86	4
1915	387.01	349	302	85	6.92	12
1917	882.68	795	689	194	7.02	28
1918	31.69	29	25	7	7.07	1
1919	32.16	29	25	7	7.12	1
1920	959.83	862	747	213	7.17	30
1921	20,846.85	18,708	16,213	4,634	7.22	642
1922	341.57	306	265	77	7.26	11
1923	21,433.95	19,198	16,638	4,796	7.31	656
1924	53,839.36	48,178	41,753	12,086	7.35	1,644
1925	36,381.69	32,520	28,183	8,199	7.40	1,108
1926	41,320.17	36,899	31,978	9,342	7.44	1,256
1927	16,317.21	14,557	12,616	3,701	7.48	495
1928	19,612.10	17,479	15,148	4,464	7.52	594
1929	43,397.96	38,637	33,484	9,914	7.56	1,311
1930	12,026.59	10,696	9,270	2,757	7.60	363
1931	9,219.84	8,190	7,098	2,122	7.64	278
1932	55.13	49	42	13	7.68	2
1933	1,706.82	1,513	1,311	396	7.72	51
1934	864.33	765	663	201	7.76	26
1937	123.14	109	94	29	7.87	4
1938	3,154.26	2,779	2,408	746	7.90	94
1939	152,145.70	133,853	116,004	36,142	7.94	4,552
1940	3,217.42	2,827	2,450	767	7.97	96
1941	7,115.97	6,244	5,411	1,705	8.00	213
1942	724.85	635	550	175	8.04	22
1943	1,841.10	1,611	1,396	445	8.07	55
1944	2,379.19	2,079	1,802	577	8.10	71
1945	1,739.38	1,517	1,315	424	8.13	52
1946	1,322.49	1,152	998	324	8.16	40
1947	592.69	515	446	147	8.19	18
1948	8,551.21	7,424	6,435	2,116	8.22	257



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.1 MAINS - CAST IRON

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. IOWA 72-R1.5						
PROBABLE RETIREMENT YEAR.. 12-2025						
NET SALVAGE PERCENT.. 0						
1949	38.65	34	29	10	8.24	1
1951	21.87	19	16	6	8.29	1
1982	333.20	266	231	102	8.69	12
	476,305.21	423,001	366,588	109,717		14,445
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.6						3.03

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.3 MAINS - BARE STEEL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2016

YEAR (1)	ORIGINAL COST . (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. IOWA 72-R1.5						
PROBABLE RETIREMENT YEAR.. 12-2025						
NET SALVAGE PERCENT.. 0						
1932	5,172.15	4,589	3,977	1,195	7.68	156
1933	10,597.07	9,392	8,139	2,458	7.72	318
1934	20,841.72	18,450	15,989	4,853	7.76	625
1935	31,790.75	28,108	24,359	7,432	7.80	953
1936	37,850.54	33,429	28,971	8,880	7.83	1,134
1937	57,856.30	51,031	44,225	13,631	7.87	1,732
1938	45,370.74	39,971	34,640	10,731	7.90	1,358
1939	46,531.74	40,937	35,478	11,054	7.94	1,392
1940	104,702.90	91,999	79,730	24,973	7.97	3,133
1941	151,696.19	133,118	115,365	36,331	8.00	4,541
1942	73,765.63	64,633	56,013	17,753	8.04	2,208
1943	46,534.23	40,716	35,286	11,248	8.07	1,394
1944	13,340.67	11,656	10,102	3,239	8.10	400
1945	14,405.71	12,568	10,892	3,514	8.13	432
1946	116,208.39	101,223	87,724	28,484	8.16	3,491
1947	81,147.78	70,572	61,160	19,988	8.19	2,441
1948	230,146.64	199,820	173,171	56,976	8.22	6,931
1949	696,987.34	604,218	523,638	173,349	8.24	21,038
1950	1,095,240.93	947,767	821,370	273,871	8.27	33,116
1951	833,197.01	719,816	623,819	209,378	8.29	25,257
1952	1,831,090.08	1,578,894	1,368,328	462,762	8.32	55,620
1953	1,293,745.11	1,113,578	965,068	328,677	8.34	39,410
1954	1,572,959.25	1,351,172	1,170,975	401,984	8.37	48,027
1955	3,819,030.17	3,274,207	2,837,548	981,482	8.39	116,982
1956	2,243,698.32	1,919,753	1,663,729	579,969	8.41	68,962
1957	2,937,296.72	2,508,011	2,173,535	763,762	8.43	90,600
1958	3,503,915.81	2,984,776	2,586,717	917,199	8.46	108,416
1959	2,798,189.48	2,378,293	2,061,116	737,073	8.48	86,919
1960	2,972,132.91	2,520,190	2,184,089	788,044	8.50	92,711
1961	3,300,179.73	2,792,150	2,419,780	880,400	8.51	103,455
1962	2,792,900.11	2,357,040	2,042,698	750,202	8.53	87,949
1963	3,660,820.43	3,081,422	2,670,474	990,346	8.55	115,830
1964	3,553,168.09	2,982,600	2,584,831	968,337	8.57	112,991
1965	2,843,950.49	2,381,012	2,063,473	780,477	8.58	90,965
1966	4,120,117.80	3,439,227	2,980,561	1,139,557	8.60	132,507
1967	3,894,967.36	3,241,275	2,809,008	1,085,959	8.62	125,981
1968	2,902,101.91	2,407,816	2,086,702	815,400	8.63	94,484
1969	2,315,164.15	1,914,409	1,659,097	656,067	8.65	75,846
1970	1,047,702.37	863,516	748,355	299,347	8.66	34,567
1971	2,528,086.09	2,076,519	1,799,588	728,498	8.67	84,025
1972	921,495.32	754,041	653,480	268,015	8.69	30,842

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.3 MAINS - BARE STEEL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. IOWA 72-R1.5						
PROBABLE RETIREMENT YEAR.. 12-2025						
NET SALVAGE PERCENT.. 0						
1973	609,620.87	496,969	430,691	178,930	8.70	20,567
1974	1,361.79	1,106	959	403	8.71	46
1975	898.31	726	629	269	8.72	31
1976	250.78	207	179	72	8.60	8
1977	2,125.28	1,743	1,511	614	8.66	71
1978	170,393.60	138,769	120,262	50,132	8.75	5,729
1979	17,806.14	14,457	12,529	5,277	8.67	609
1980	205,994.43	165,784	143,675	62,319	8.83	7,058
1981	58.57	47	41	18	8.83	2
1982	251.54	201	174	78	8.69	9
1983	7,617.15	6,033	5,228	2,389	8.78	272
1984	328.51	259	224	105	8.74	12
1985	35.45	28	24	11	8.74	1
1986	82.28	64	55	27	8.80	3
1988	0.10					
1989	896.73	679	588	309	8.82	35
1990	11,726.11	8,797	7,624	4,102	8.80	466
1992	45,240.53	33,247	28,814	16,427	8.81	1,865
1997	4,020.11	2,763	2,395	1,625	8.83	184
1998	664.36	449	389	275	8.83	31
2008	78.02	38	33	45	8.85	5
2011	32,447.32	12,320	10,677	21,770	8.85	2,460
	61,677,994.11	52,028,600	45,089,901	16,588,093		1,948,603

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 8.5 3.16

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.45 MAINS - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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 72-R1.5						
NET SALVAGE PERCENT.. 0						
1952	96,266.08	60,273	52,235	44,031	26.92	1,636
1954	26,234.26	16,039	13,900	12,334	27.98	441
1955	97,484.35	58,870	51,019	46,465	28.52	1,629
1956	91,998.27	54,854	47,538	44,460	29.07	1,529
1957	97,856.49	57,586	49,906	47,950	29.63	1,618
1958	79,703.23	46,283	40,111	39,592	30.19	1,311
1959	91,077.23	52,167	45,210	45,867	30.76	1,491
1960	64,100.47	36,199	31,371	32,729	31.34	1,044
1961	31,098.19	17,311	15,002	16,096	31.92	504
1962	82,815.43	45,422	39,364	43,451	32.51	1,337
1963	87,706.00	47,374	41,056	46,650	33.11	1,409
1964	168,506.58	89,613	77,662	90,845	33.71	2,695
1965	87,979.18	46,042	39,902	48,077	34.32	1,401
1966	109,631.91	56,445	48,917	60,715	34.93	1,738
1967	81,999.64	41,501	35,966	46,034	35.56	1,295
1968	311,006.50	154,726	134,091	176,916	36.18	4,890
1969	674,683.77	329,657	285,693	388,991	36.82	10,565
1970	700,339.49	335,967	291,161	409,178	37.46	10,923
1971	1,405,810.34	661,898	573,625	832,185	38.10	21,842
1972	1,160,584.71	535,970	464,491	696,094	38.75	17,964
1973	2,623,200.03	1,187,365	1,029,014	1,594,186	39.41	40,451
1974	2,993,369.65	1,327,470	1,150,434	1,842,936	40.07	45,993
1975	2,945,849.41	1,278,999	1,108,428	1,837,421	40.74	45,101
1976	2,880,589.02	1,548,317	1,341,829	1,538,760	34.77	44,255
1977	5,359,616.03	2,830,949	2,453,405	2,906,211	35.21	82,539
1978	5,301,318.53	2,729,119	2,365,155	2,936,164	36.21	81,087
1979	6,370,217.52	3,217,597	2,788,488	3,581,730	36.66	97,701
1980	7,863,661.26	3,894,871	3,375,439	4,488,222	37.11	120,944
1981	9,161,035.78	4,444,935	3,852,144	5,308,892	37.58	141,269
1982	9,233,495.49	4,385,910	3,800,991	5,432,504	38.04	142,810
1983	7,322,044.68	3,401,090	2,947,510	4,374,535	38.53	113,536
1984	8,420,302.40	3,821,133	3,311,535	5,108,767	39.01	130,960
1985	7,861,154.62	3,482,491	3,018,055	4,843,100	39.50	122,610
1986	8,759,877.74	3,783,391	3,278,826	5,481,052	40.01	136,992
1987	8,429,143.13	3,546,141	3,073,216	5,355,927	40.51	132,212
1988	9,746,301.15	4,015,476	3,479,959	6,266,342	40.55	154,534
1989	8,721,132.19	3,491,069	3,025,489	5,695,643	41.08	138,648
1990	7,389,112.55	2,869,192	2,486,547	4,902,566	41.61	117,822
1991	7,292,564.45	2,743,463	2,377,586	4,914,978	42.15	116,607
1992	8,166,165.14	2,970,851	2,574,649	5,591,516	42.70	130,949
1993	8,820,574.83	3,118,955	2,703,001	6,117,574	42.81	142,901
1994	10,845,388.28	3,695,024	3,202,244	7,643,144	43.38	176,191

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.45 MAINS - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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 72-R1.5						
NET SALVAGE PERCENT.. 0						
1995	10,808,682.66	3,542,005	3,069,632	7,739,051	43.94	176,128
1996	10,666,867.48	3,376,064	2,925,821	7,741,046	44.10	175,534
1997	13,386,471.65	4,054,762	3,514,006	9,872,466	44.69	220,910
1998	11,502,500.56	3,347,228	2,900,831	8,601,670	44.87	191,702
1999	10,906,098.04	3,019,899	2,617,156	8,288,942	45.48	182,255
2000	10,024,619.98	2,649,507	2,296,160	7,728,460	45.70	169,113
2001	11,873,074.53	2,983,704	2,585,788	9,287,287	45.93	202,205
2002	7,675,933.22	1,826,105	1,582,570	6,093,363	46.19	131,920
2003	11,458,523.14	2,567,855	2,225,398	9,233,125	46.46	198,733
2004	18,316,148.94	3,842,728	3,330,250	14,985,899	46.76	320,485
2005	24,401,299.65	4,763,134	4,127,907	20,273,393	47.06	430,799
2006	13,501,257.05	2,446,428	2,120,165	11,381,092	47.06	241,842
2007	38,293,884.84	6,345,297	5,499,068	32,794,817	47.40	691,874
2008	58,233,585.97	8,775,801	7,605,433	50,628,153	47.45	1,066,979
2009	35,924,349.50	4,874,934	4,224,797	31,699,552	47.23	671,174
2010	47,315,390.92	5,649,458	4,896,028	42,419,363	47.34	896,058
2011	85,859,058.73	8,886,413	7,701,293	78,157,766	46.94	1,665,057
2012	95,065,152.23	8,232,642	7,134,711	87,930,441	46.60	1,886,919
2013	120,720,006.26	8,329,680	7,218,808	113,501,198	46.09	2,462,599
2014	129,251,299.65	6,591,816	5,712,711	123,538,589	44.98	2,746,523
2015	113,200,718.69	3,611,103	3,129,515	110,071,204	43.03	2,558,011
2016	150,409,146.00	1,774,828	1,538,131	148,871,015	38.45	3,871,808
	1,190,847,065.69	172,019,396	149,078,343	1,041,768,723		23,702,002
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						44.0 1.99

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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-R0.5						
NET SALVAGE PERCENT.. 0						
1894	611.40	611	611			
1903	4.21	4	4			
1912	36.03	36	36			
1914	82.76	83	83			
1920	82.25	82	82			
1928	128.33	126	121	7	0.79	7
1929	422.90	411	395	28	1.27	22
1930	198.61	191	183	16	1.75	9
1931	182.68	174	167	16	2.22	7
1932	591.35	556	534	57	2.69	21
1933	1,462.05	1,360	1,306	156	3.15	50
1934	447.59	412	396	52	3.61	14
1935	393.89	358	344	50	4.06	12
1936	253.97	229	220	34	4.49	8
1938	682.42	601	577	105	5.35	20
1939	873.37	761	731	142	5.77	25
1940	1,003.19	865	831	172	6.18	28
1941	2,752.72	2,350	2,256	497	6.59	75
1942	5,592.22	4,724	4,536	1,056	6.99	151
1943	128.66	108	104	25	7.39	3
1944	1,620.99	1,340	1,287	334	7.79	43
1945	792.20	648	622	170	8.19	21
1946	259.74	210	202	58	8.58	7
1947	1,059.35	848	814	245	8.98	27
1948	922.47	730	701	221	9.38	24
1949	1,805.68	1,414	1,358	448	9.77	46
1950	12,844.24	9,941	9,545	3,299	10.17	324
1951	20,850.50	15,953	15,318	5,532	10.57	523
1952	76,748.06	58,038	55,729	21,019	10.97	1,916
1953	84,399.94	63,075	60,565	23,835	11.37	2,096
1954	34,906.83	25,769	24,744	10,163	11.78	863
1955	142,029.14	103,586	99,464	42,565	12.18	3,495
1956	70,613.81	50,857	48,833	21,781	12.59	1,730
1957	89,719.18	63,780	61,242	28,477	13.01	2,189
1958	161,902.50	113,620	109,099	52,804	13.42	3,935
1959	113,518.15	78,580	75,453	38,065	13.85	2,748
1960	248,160.54	169,466	162,723	85,438	14.27	5,987
1961	129,537.36	87,221	83,751	45,786	14.70	3,115
1962	170,662.37	113,282	108,775	61,887	15.13	4,090
1963	161,166.84	105,403	101,209	59,958	15.57	3,851
1964	98,304.52	63,330	60,810	37,495	16.01	2,342
1965	83,783.83	53,156	51,041	32,743	16.45	1,990

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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-R0.5						
NET SALVAGE PERCENT.. 0						
1966	128,550.11	80,272	77,078	51,472	16.90	3,046
1967	60,626.99	37,238	35,756	24,871	17.36	1,433
1968	63,642.73	38,440	36,911	26,732	17.82	1,500
1969	81,015.41	48,105	46,191	34,824	18.28	1,905
1970	43,982.42	25,656	24,635	19,347	18.75	1,032
1971	189,554.20	108,552	104,233	85,321	19.23	4,437
1972	150,067.11	84,338	80,982	69,085	19.71	3,505
1973	145,105.01	80,001	76,818	68,287	20.19	3,382
1974	122,331.16	66,086	63,457	58,874	20.69	2,846
1975	115,979.10	61,391	58,948	57,031	21.18	2,693
1976	92,690.56	63,308	60,789	31,902	18.76	1,701
1977	71,520.99	48,205	46,287	25,234	19.06	1,324
1978	71,736.71	47,404	45,518	26,219	19.72	1,330
1979	88,932.98	57,895	55,591	33,342	20.06	1,662
1980	161,502.33	103,507	99,389	62,113	20.40	3,045
1981	187,288.25	118,067	113,369	73,919	20.76	3,561
1982	492,109.79	304,862	292,732	199,378	21.14	9,431
1983	202,831.79	123,362	118,454	84,378	21.53	3,919
1984	196,229.73	117,679	112,997	83,233	21.64	3,846
1985	249,445.30	146,549	140,718	108,727	22.06	4,929
1986	227,511.21	130,796	125,592	101,919	22.49	4,532
1987	213,107.00	119,745	114,981	98,126	22.94	4,278
1988	373,400.31	205,856	197,665	175,735	23.13	7,598
1989	403,507.94	216,845	208,217	195,291	23.60	8,275
1990	297,776.86	156,541	150,312	147,465	23.83	6,188
1991	240,007.21	123,220	118,317	121,690	24.09	5,051
1992	159,512.44	79,836	76,659	82,853	24.37	3,400
1993	226,358.32	109,716	105,351	121,007	24.89	4,862
1994	381,321.67	180,365	173,189	208,133	24.98	8,332
1995	238,857.06	109,468	105,112	133,745	25.31	5,284
1996	488,163.56	216,256	207,651	280,513	25.67	10,928
1997	514,984.58	220,980	212,188	302,797	25.83	11,723
1998	365,343.00	150,704	144,708	220,635	26.23	8,412
1999	708,110.62	281,191	270,003	438,108	26.44	16,570
2000	1,137,136.32	434,955	417,649	719,487	26.50	27,150
2001	325,739.01	119,025	114,289	211,450	26.78	7,896
2002	366,933.47	128,023	122,929	244,004	26.90	9,071
2003	683,374.97	226,470	217,459	465,916	27.07	17,212
2004	525,382.47	165,023	158,457	366,925	27.11	13,535
2005	689,961.29	204,022	195,904	494,057	27.19	18,171
2006	1,701,641.74	471,525	452,764	1,248,878	27.18	45,948
2007	344,820.38	88,653	85,126	259,694	27.21	9,544

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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-R0.5						
NET SALVAGE PERCENT.. 0						
2008	1,847,757.27	438,658	421,204	1,426,553	27.04	52,757
2009	1,044,117.53	225,321	216,356	827,762	26.95	30,715
2010	1,508,170.04	293,188	281,522	1,226,648	26.59	46,132
2011	2,280,549.17	390,430	374,895	1,905,654	26.23	72,652
2012	1,779,444.89	260,867	250,487	1,528,958	25.70	59,493
2013	3,264,902.79	392,768	377,140	2,887,763	24.99	115,557
2014	12,191,664.31	1,119,195	1,074,665	11,116,999	23.90	465,146
2015	2,838,051.75	170,851	164,053	2,673,999	22.11	120,941
2016	2,034,126.00	49,633	47,658	1,986,468	18.30	108,550
	44,038,416.69	10,435,332	10,020,157	34,018,260		1,428,244
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						23.8 3.24



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 379.1 MEASURING AND REGULATING EQUIPMENT - CITY GATE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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 35-S2.5						
NET SALVAGE PERCENT.. 0						
1976	591.42	519	484	107	5.67	19
1983	32,512.26	26,400	24,617	7,895	7.74	1,020
1984	1,528.08	1,224	1,141	387	8.07	48
1987	7,476.62	5,696	5,311	2,166	9.19	236
1988	15,907.49	11,889	11,086	4,821	9.60	502
1989	35,024.29	25,638	23,907	11,117	10.04	1,107
1996	48,076.94	28,563	26,634	21,443	13.95	1,537
	141,117.10	99,929	93,180	47,937		4,469

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 10.7 3.17

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 380.3 SERVICES - BARE STEEL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. IOWA 50-R0.5						
PROBABLE RETIREMENT YEAR.. 12-2025						
NET SALVAGE PERCENT.. 0						
1917	266.62	265	267			
1918	564.20	555	564			
1919	940.01	916	940			
1920	962.06	928	954	8	1.75	5
1921	855.77	818	841	15	2.23	7
1922	2,229.74	2,109	2,168	62	2.70	23
1923	4,263.64	3,993	4,104	160	3.17	50
1924	4,048.16	3,754	3,858	190	3.63	52
1925	7,481.98	6,871	7,062	420	4.08	103
1926	7,643.69	6,953	7,146	498	4.52	110
1927	7,384.68	6,664	6,849	536	4.88	110
1928	7,440.85	6,671	6,856	585	5.17	113
1929	7,689.08	6,855	7,045	644	5.42	119
1930	5,127.43	4,550	4,676	451	5.63	80
1931	2,678.28	2,367	2,433	245	5.81	42
1932	1,830.95	1,612	1,657	174	5.97	29
1933	2,556.55	2,243	2,305	252	6.11	41
1934	2,306.29	2,017	2,073	233	6.24	37
1935	2,064.17	1,801	1,851	213	6.35	34
1936	4,130.98	3,594	3,694	437	6.46	68
1937	5,825.06	5,055	5,195	630	6.56	96
1938	9,227.09	7,988	8,210	1,017	6.65	153
1939	15,219.46	13,148	13,513	1,706	6.73	253
1940	12,895.48	11,114	11,422	1,473	6.82	216
1941	15,950.79	13,719	14,100	1,851	6.89	269
1942	16,079.75	13,802	14,185	1,895	6.96	272
1943	6,831.99	5,852	6,014	818	7.03	116
1944	5,236.69	4,476	4,600	637	7.10	90
1945	5,684.83	4,850	4,985	700	7.16	98
1946	15,341.83	13,063	13,426	1,916	7.22	265
1947	29,840.98	25,357	26,061	3,780	7.28	519
1948	38,898.78	32,985	33,900	4,999	7.34	681
1949	57,470.37	48,641	49,991	7,479	7.39	1,012
1950	75,313.14	63,618	65,384	9,929	7.44	1,335
1951	95,486.50	80,493	82,727	12,760	7.49	1,704

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 380.3 SERVICES - BARE STEEL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2016

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. IOWA 50-R0.5						
PROBABLE RETIREMENT YEAR.. 12-2025						
NET SALVAGE PERCENT.. 0						
1952	103,010.04	86,655	89,060	13,950	7.54	1,850
1953	96,552.61	81,067	83,317	13,236	7.58	1,746
1954	151,601.30	127,006	130,530	21,071	7.63	2,762
	828,931.82	704,425	723,963	104,969		14,460
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.3						1.74

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 380.45 SERVICES - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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						
1955	229,943.28	154,522	158,808	71,135	16.40	4,338
1956	291,665.11	193,491	198,858	92,807	16.83	5,514
1957	274,377.04	179,607	184,589	89,788	17.27	5,199
1958	345,733.54	223,275	229,468	116,266	17.71	6,565
1959	459,950.07	292,988	301,114	158,836	18.15	8,751
1960	494,350.10	310,452	319,063	175,287	18.60	9,424
1961	551,718.16	341,403	350,872	200,846	19.06	10,538
1962	567,363.86	345,978	355,574	211,790	19.51	10,855
1963	690,062.97	414,314	425,806	264,257	19.98	13,226
1964	699,831.29	413,740	425,216	274,615	20.44	13,435
1965	682,737.70	397,217	408,234	274,504	20.91	13,128
1966	933,558.46	534,182	548,998	384,560	21.39	17,978
1967	941,612.77	529,751	544,444	397,169	21.87	18,160
1968	1,012,337.11	559,822	575,349	436,988	22.35	19,552
1969	750,802.04	407,836	419,148	331,654	22.84	14,521
1970	565,725.92	301,645	310,012	255,714	23.34	10,956
1971	616,167.87	322,502	331,447	284,721	23.83	11,948
1972	631,545.35	324,109	333,099	298,446	24.34	12,262
1973	501,554.07	252,282	259,279	242,275	24.85	9,749
1974	116,222.12	57,274	58,863	57,359	25.36	2,262
1975	246,426.61	118,876	122,173	124,254	25.88	4,801
1976	716,210.35	460,237	473,002	243,208	22.48	10,819
1977	2,432,765.61	1,534,345	1,576,902	855,864	23.08	37,082
1978	1,732,659.94	1,078,408	1,108,319	624,341	23.31	26,784
1979	2,235,121.11	1,371,470	1,409,509	825,612	23.56	35,043
1980	3,188,249.03	1,915,819	1,968,957	1,219,292	24.19	50,405
1981	3,421,125.99	2,023,596	2,079,723	1,341,403	24.46	54,841
1982	2,903,698.60	1,688,791	1,735,632	1,168,067	24.76	47,176
1983	2,688,670.12	1,536,306	1,578,917	1,109,753	25.06	44,284
1984	3,125,003.80	1,752,502	1,801,110	1,323,894	25.39	52,142
1985	3,487,489.28	1,917,422	1,970,604	1,516,885	25.73	58,954
1986	3,978,867.93	2,142,222	2,201,639	1,777,229	26.08	68,145
1987	4,575,871.86	2,409,654	2,476,489	2,099,383	26.45	79,372
1988	5,486,207.62	2,821,557	2,899,817	2,586,391	26.83	96,399
1989	5,293,387.93	2,655,693	2,729,352	2,564,036	27.23	94,162
1990	5,525,020.98	2,714,995	2,790,299	2,734,722	27.34	100,026
1991	5,143,809.96	2,457,712	2,525,880	2,617,930	27.78	94,238
1992	5,881,911.29	2,743,323	2,819,413	3,062,498	27.94	109,610
1993	6,172,911.69	2,789,539	2,866,910	3,306,002	28.40	116,409
1994	7,303,997.35	3,209,376	3,298,392	4,005,605	28.60	140,056
1995	6,909,282.06	2,944,736	3,026,412	3,882,870	28.83	134,682
1996	6,458,953.70	2,663,673	2,737,553	3,721,401	29.09	127,927

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 380.45 SERVICES - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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						
1997	6,918,732.95	2,753,656	2,830,032	4,088,701	29.37	139,214
1998	7,419,644.31	2,855,821	2,935,031	4,484,613	29.43	152,382
1999	7,747,899.50	2,860,524	2,939,864	4,808,036	29.75	161,615
2000	7,616,855.58	2,700,937	2,775,851	4,841,005	29.88	162,015
2001	7,331,486.43	2,486,840	2,555,816	4,775,670	30.04	158,977
2002	6,487,737.40	2,104,622	2,162,996	4,324,741	30.03	144,014
2003	6,149,218.81	1,889,040	1,941,435	4,207,784	30.25	139,100
2004	9,913,540.85	2,892,771	2,973,006	6,940,535	30.14	230,277
2005	9,026,465.18	2,473,251	2,541,850	6,484,615	30.25	214,367
2006	9,664,648.92	2,476,083	2,544,760	7,119,889	30.24	235,446
2007	13,701,486.37	3,263,694	3,354,217	10,347,269	30.11	343,649
2008	15,487,352.31	3,402,571	3,496,946	11,990,406	29.90	401,017
2009	14,407,871.96	2,884,456	2,964,460	11,443,412	29.62	386,341
2010	16,911,413.87	3,038,981	3,123,271	13,788,143	29.30	470,585
2011	23,902,484.09	3,767,031	3,871,515	20,030,969	28.95	691,916
2012	30,110,339.10	4,070,918	4,183,830	25,926,509	28.26	917,428
2013	36,043,114.47	3,989,973	4,100,640	31,942,474	27.45	1,163,660
2014	37,920,835.87	3,208,103	3,297,084	34,623,752	26.15	1,324,044
2015	43,338,774.83	2,400,968	2,467,563	40,871,212	24.16	1,691,689
2016	35,497,231.00	795,138	817,192	34,680,039	20.03	1,731,405
	445,862,035.44	107,822,020	110,812,604	335,049,431		12,660,859
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						26.5 2.84

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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 43-S1.5						
NET SALVAGE PERCENT.. 0						
1913	16.18	16	16			
1914	16.01	16	16			
1915	21.39	21	21			
1916	56.79	57	57			
1917	171.91	172	172			
1918	689.41	689	689			
1919	467.64	468	468			
1920	275.68	276	276			
1921	604.18	604	604			
1922	1,410.24	1,410	1,410			
1923	1,603.16	1,603	1,603			
1924	1,384.48	1,384	1,384			
1925	2,885.01	2,885	2,885			
1926	3,399.26	3,399	3,399			
1927	4,274.59	4,275	4,275			
1928	5,348.59	5,349	5,349			
1929	4,598.31	4,598	4,598			
1930	355.98	356	356			
1931	22.74	23	23			
1934	119.27	117	119			
1935	24.71	24	24	1	1.20	1
1936	434.07	419	425	9	1.47	6
1937	71.30	68	69	2	1.72	1
1938	215.61	206	209	7	1.98	4
1939	395.09	375	380	15	2.24	7
1941	1,996.42	1,869	1,894	102	2.74	37
1942	3,097.93	2,882	2,921	177	3.00	59
1943	1,788.26	1,653	1,675	113	3.25	35
1944	111.47	102	103	8	3.50	2
1945	663.56	606	614	50	3.75	13
1946	4,011.86	3,638	3,687	325	4.01	81
1947	2,170.16	1,955	1,981	189	4.26	44
1948	14,960.85	13,392	13,573	1,388	4.51	308
1949	16,163.43	14,370	14,565	1,598	4.77	335
1950	28,121.69	24,832	25,168	2,954	5.03	587
1951	53,204.59	46,659	47,291	5,914	5.29	1,118
1952	34,071.42	29,674	30,076	3,995	5.55	720
1953	18,525.98	16,023	16,240	2,286	5.81	393
1954	52,279.89	44,888	45,496	6,784	6.08	1,116
1955	65,784.33	56,070	56,829	8,955	6.35	1,410
1956	30,667.44	25,939	26,290	4,377	6.63	660
1957	164,053.90	137,690	139,555	24,499	6.91	3,545

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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 43-S1.5						
NET SALVAGE PERCENT.. 0						
1958	170,520.74	142,008	143,931	26,590	7.19	3,698
1959	173,329.71	143,179	145,118	28,212	7.48	3,772
1960	195,734.89	160,366	162,538	33,197	7.77	4,272
1961	243,153.43	197,521	200,196	42,957	8.07	5,323
1962	226,132.94	182,064	184,530	41,603	8.38	4,965
1963	145,151.00	115,817	117,386	27,765	8.69	3,195
1964	211,116.70	166,930	169,191	41,926	9.00	4,658
1965	261,269.25	204,579	207,350	53,919	9.33	5,779
1966	309,151.95	239,701	242,948	66,204	9.66	6,853
1967	293,069.64	224,981	228,028	65,042	9.99	6,511
1968	208,798.44	158,589	160,737	48,061	10.34	4,648
1969	220,527.09	165,704	167,948	52,579	10.69	4,919
1970	190,235.47	141,349	143,264	46,971	11.05	4,251
1971	304,086.72	223,327	226,352	77,735	11.42	6,807
1972	253,621.40	184,023	186,515	67,106	11.80	5,687
1973	145,402.03	104,182	105,593	39,809	12.19	3,266
1974	190,595.43	134,835	136,661	53,934	12.58	4,287
1975	233,856.22	163,211	165,422	68,434	12.99	5,268
1976	110,418.99	85,243	86,398	24,021	11.94	2,012
1977	190,541.47	144,945	146,908	43,633	12.40	3,519
1978	190,969.25	143,800	145,748	45,221	12.60	3,589
1979	312,674.68	231,629	234,766	77,909	13.09	5,952
1980	619,258.61	453,297	459,437	159,822	13.33	11,990
1981	669,900.04	484,003	490,559	179,341	13.60	13,187
1982	455,374.62	322,861	327,234	128,141	14.13	9,069
1983	336,287.71	234,863	238,044	98,244	14.43	6,808
1984	454,229.07	310,693	314,901	139,328	14.98	9,301
1985	565,495.92	380,183	385,332	180,164	15.31	11,768
1986	618,688.85	408,335	413,866	204,823	15.67	13,071
1987	629,469.46	407,393	412,911	216,558	16.04	13,501
1988	696,608.30	439,421	445,373	251,235	16.63	15,107
1989	805,306.57	496,794	503,523	301,784	17.03	17,721
1990	508,088.48	306,022	310,167	197,921	17.44	11,349
1991	570,844.48	333,716	338,236	232,608	18.06	12,880
1992	844,782.90	480,597	487,106	357,677	18.50	19,334
1993	974,086.43	538,280	545,571	428,515	18.96	22,601
1994	402,547.28	215,685	218,606	183,941	19.42	9,472
1995	8,130.87	4,196	4,253	3,878	20.08	193
1996	1,750,671.08	872,184	883,997	866,674	20.57	42,133
1997	767,980.76	368,324	373,313	394,668	21.07	18,731
1998	1,076,784.34	493,813	500,501	576,283	21.74	26,508
1999	1,225,557.97	537,897	545,183	680,375	22.27	30,551

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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 43-S1.5						
NET SALVAGE PERCENT.. 0						
2000	77,557.96	32,342	32,780	44,778	22.95	1,951
2001	520,857.95	206,364	209,159	311,699	23.49	13,269
2002	1,172,797.68	437,923	443,854	728,944	24.19	30,134
2003	858,871.43	300,777	304,851	554,020	24.90	22,250
2004	1,191,141.77	390,456	395,745	795,397	25.46	31,241
2005	396,274.19	120,348	121,978	274,296	26.18	10,477
2006	627,910.04	175,312	177,686	450,224	26.90	16,737
2007	1,035,776.09	263,294	266,860	768,916	27.62	27,839
2008	1,085,195.62	247,533	250,886	834,310	28.48	29,295
2009	1,426,652.97	288,897	292,810	1,133,843	29.21	38,817
2010	1,148,690.45	202,744	205,490	943,200	29.95	31,492
2011	1,056,688.00	157,975	160,115	896,573	30.82	29,091
2012	1,380,642.30	168,853	171,140	1,209,502	31.69	38,167
2013	1,311,545.91	124,597	126,285	1,185,261	32.55	36,414
2014	1,191,676.24	80,319	81,407	1,110,269	33.43	33,212
2015	1,380,362.83	54,800	55,542	1,324,821	34.30	38,625
2016	1,132,847.00	14,500	14,696	1,118,151	35.26	31,712
	36,276,474.39	15,464,626	15,673,710	20,602,764		889,711
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						23.2 2.45



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381.1 METERS - AMR

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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-S2.5						
NET SALVAGE PERCENT.. 0						
2000	284,099.54	244,865	235,506	48,594	2.63	18,477
2001	269,270.60	226,241	217,594	51,677	2.93	17,637
2003	503.04	396	381	122	3.62	34
2004	106,038.47	80,048	76,989	29,049	4.03	7,208
2005	166,937.49	119,878	115,296	51,641	4.48	11,527
2007	106,733.66	67,135	64,569	42,165	5.55	7,597
2008	483,434.90	278,700	268,048	215,387	6.18	34,852
2009	419,653.87	217,884	209,556	210,098	6.87	30,582
2010	823,550.67	376,280	361,899	461,652	7.63	60,505
2011	11,253,446.81	4,394,471	4,226,514	7,026,933	8.45	831,590
2012	8,731,855.56	2,807,292	2,699,998	6,031,858	9.32	647,195
2014	306,925.20	54,510	52,426	254,499	11.19	22,743
2015	372,439.32	38,845	37,361	335,078	12.17	27,533
2016	495,000.00	16,682	16,044	478,956	13.13	36,478
	23,819,889.13	8,923,227	8,582,181	15,237,708		1,753,958
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						8.7 7.36

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 382 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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-R2.5						
NET SALVAGE PERCENT.. 0						
1937	5,790.60	5,200	5,558	233	5.61	42
1938	12,127.45	10,840	11,586	541	5.84	93
1939	8,972.44	7,982	8,531	441	6.07	73
1940	7,898.92	6,994	7,475	424	6.30	67
1941	11,234.79	9,901	10,582	653	6.53	100
1942	8,418.59	7,382	7,890	529	6.77	78
1943	3,816.58	3,330	3,559	258	7.01	37
1944	3,855.86	3,347	3,577	279	7.26	38
1945	5,122.03	4,423	4,727	395	7.51	53
1946	12,419.28	10,665	11,399	1,020	7.77	131
1947	18,105.34	15,459	16,522	1,583	8.04	197
1948	23,025.41	19,547	20,892	2,133	8.31	257
1949	29,740.30	25,095	26,821	2,919	8.59	340
1950	34,597.60	29,005	31,000	3,598	8.89	405
1951	30,192.07	25,147	26,877	3,315	9.19	361
1952	31,466.03	26,031	27,822	3,644	9.50	384
1953	37,662.80	30,931	33,059	4,604	9.83	468
1954	35,397.72	28,852	30,837	4,561	10.17	448
1955	44,458.88	35,955	38,428	6,031	10.52	573
1956	46,947.69	37,652	40,242	6,706	10.89	616
1957	43,172.01	34,326	36,687	6,485	11.27	575
1958	56,325.85	44,375	47,428	8,898	11.67	762
1959	67,314.99	52,530	56,144	11,171	12.08	925
1960	49,077.73	37,915	40,523	8,555	12.51	684
1961	42,523.35	32,511	34,747	7,776	12.95	600
1962	60,836.48	46,003	49,168	11,668	13.41	870
1963	64,802.74	48,437	51,769	13,034	13.89	938
1964	116,250.98	85,857	91,763	24,488	14.38	1,703
1965	154,330.94	112,549	120,291	34,040	14.89	2,286
1966	143,039.99	102,963	110,046	32,994	15.41	2,141
1967	131,943.37	93,680	100,124	31,819	15.95	1,995
1968	169,352.88	118,547	126,702	42,651	16.50	2,585
1969	160,319.02	110,562	118,168	42,151	17.07	2,469
1970	146,936.64	99,783	106,647	40,290	17.65	2,283
1971	128,374.91	85,778	91,679	36,696	18.25	2,011
1972	80,724.39	53,043	56,692	24,032	18.86	1,274
1973	75,013.74	48,445	51,778	23,236	19.48	1,193
1974	13,965.93	8,859	9,468	4,498	20.11	224
1975	25,295.22	15,748	16,831	8,464	20.76	408
1976	49,455.54	33,580	35,890	13,566	19.11	710
1977	55,819.05	37,181	39,739	16,080	19.76	814
1978	52,498.50	34,486	36,858	15,640	20.06	780

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 382 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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-R2.5						
NET SALVAGE PERCENT.. 0						
1979	133,747.28	86,080	92,002	41,745	20.72	2,015
1980	330,080.15	207,950	222,255	107,825	21.39	5,041
1981	412,813.91	254,376	271,875	140,939	22.06	6,389
1982	323,165.86	194,643	208,033	115,133	22.73	5,065
1983	374,719.16	221,646	236,893	137,826	23.08	5,972
1984	450,682.98	260,044	277,933	172,750	23.76	7,271
1985	465,580.37	261,842	279,854	185,726	24.45	7,596
1986	538,993.72	295,099	315,399	223,595	25.14	8,894
1987	605,460.38	324,163	346,462	258,998	25.53	10,145
1988	682,211.99	354,750	379,154	303,058	26.23	11,554
1989	773,043.00	390,000	416,828	356,215	26.93	13,227
1990	784,492.48	383,381	409,754	374,738	27.64	13,558
1991	703,089.05	334,178	357,166	345,923	28.06	12,328
1992	767,140.25	352,117	376,340	390,800	28.78	13,579
1993	649,912.78	287,651	307,439	342,474	29.49	11,613
1994	753,043.59	320,721	342,784	410,260	30.22	13,576
1995	663,465.95	272,817	291,584	371,882	30.67	12,125
1996	756,116.28	297,910	318,404	437,712	31.40	13,940
1997	723,106.90	272,394	291,132	431,975	32.13	13,445
1998	620,374.98	222,777	238,102	382,273	32.87	11,630
1999	521,197.10	178,823	191,124	330,073	33.35	9,897
2000	1,148,062.26	373,120	398,787	749,275	34.09	21,979
2001	1,046,366.95	321,025	343,109	703,258	34.83	20,191
2002	1,003,475.36	290,807	310,812	692,663	35.33	19,606
2003	1,101,325.31	298,459	318,990	782,335	36.09	21,677
2004	1,078,054.79	273,071	291,856	786,199	36.60	21,481
2005	1,193,535.66	279,287	298,499	895,037	37.37	23,951
2006	1,249,694.10	269,434	287,969	961,725	37.89	25,382
2007	1,478,319.37	289,603	309,525	1,168,794	38.66	30,233
2008	1,434,464.87	253,613	271,059	1,163,406	39.20	29,679
2009	1,886,532.42	296,563	316,964	1,569,568	39.75	39,486
2010	1,507,574.59	206,990	221,229	1,286,346	40.31	31,911
2011	1,469,981.25	171,988	183,819	1,286,162	40.88	31,462
2012	1,672,099.56	161,692	172,815	1,499,285	41.25	36,346
2013	1,027,565.46	77,889	83,247	944,318	41.63	22,684
2014	1,238,113.58	67,601	72,252	1,165,862	41.83	27,871
2015	1,357,957.15	44,677	47,750	1,310,207	41.69	31,427
2016	1,134,376.00	12,818	13,700	1,120,676	40.19	27,884
	36,358,561.47	11,142,895	11,909,425	24,449,136		705,101

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 34.7 1.94

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 383 HOUSE REGULATORS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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-S2						
NET SALVAGE PERCENT.. 0						
1939	56.15	56	56			
1949	66.22	62	66			
1955	387.26	351	387			
1957	443.81	397	438	6	4.19	1
1958	639.95	569	628	12	4.43	3
1960	487.40	427	471	16	4.93	3
1961	851.66	741	817	35	5.19	7
1962	6,625.09	5,721	6,311	314	5.46	58
1963	10,511.95	9,006	9,935	577	5.73	101
1964	14,958.64	12,711	14,022	937	6.01	156
1965	18,780.92	15,828	17,461	1,320	6.29	210
1966	47,828.95	39,961	44,083	3,746	6.58	569
1967	37,314.05	30,896	34,083	3,231	6.88	470
1968	49,176.59	40,337	44,498	4,679	7.19	651
1969	45,162.85	36,695	40,480	4,683	7.50	624
1970	49,143.37	39,524	43,601	5,542	7.83	708
1971	41,581.38	33,099	36,513	5,068	8.16	621
1972	24,076.89	18,961	20,917	3,160	8.50	372
1973	21,301.10	16,588	18,299	3,002	8.85	339
1974	2,496.21	1,921	2,119	377	9.21	41
1975	2,169.24	1,649	1,819	350	9.59	36
1976	4,322.28	3,529	3,893	429	9.09	47
1977	4,572.06	3,694	4,075	497	9.37	53
1978	6,730.11	5,378	5,933	797	9.66	83
1979	14,822.78	11,703	12,910	1,913	9.98	192
1980	33,981.17	26,482	29,214	4,767	10.31	462
1981	48,390.80	37,019	40,838	7,553	10.88	694
1982	45,177.41	34,050	37,562	7,615	11.25	677
1983	46,026.60	34,143	37,665	8,362	11.63	719
1984	49,328.64	35,980	39,692	9,637	12.03	801
1985	50,513.36	36,183	39,915	10,598	12.44	852
1986	65,514.61	46,031	50,779	14,736	12.87	1,145
1987	70,865.32	48,989	54,043	16,822	13.14	1,280
1988	87,752.99	59,347	65,469	22,284	13.60	1,639
1989	94,007.27	62,111	68,518	25,489	14.08	1,810
1990	91,405.56	58,920	64,998	26,408	14.57	1,812
1991	76,158.79	47,812	52,744	23,415	15.07	1,554
1992	83,600.37	51,030	56,294	27,306	15.58	1,753
1993	60,168.47	35,505	39,168	21,000	16.27	1,291
1994	72,775.88	41,599	45,890	26,886	16.80	1,600
1995	81,148.48	44,843	49,469	31,679	17.34	1,827
1996	85,810.37	45,728	50,445	35,365	17.90	1,976

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 383 HOUSE REGULATORS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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-S2						
NET SALVAGE PERCENT.. 0						
1997	99,190.55	50,657	55,883	43,308	18.60	2,328
1998	36,540.81	17,901	19,748	16,793	19.18	876
1999	19,170.64	8,949	9,872	9,299	19.90	467
2000	179,501.35	79,555	87,762	91,739	20.62	4,449
2001	69,707.47	29,228	32,243	37,464	21.35	1,755
2002	378,493.02	149,505	164,927	213,566	22.08	9,672
2003	547,015.81	202,560	223,455	323,561	22.82	14,179
2004	843,303.11	290,012	319,928	523,375	23.69	22,093
2005	678,403.10	216,071	238,360	440,043	24.43	18,012
2006	666,255.57	194,347	214,395	451,861	25.30	17,860
2007	737,759.34	195,211	215,348	522,411	26.17	19,962
2008	554,250.51	131,579	145,152	409,099	27.04	15,129
2009	785,883.34	164,407	181,367	604,516	28.04	21,559
2010	637,244.55	115,724	127,661	509,584	28.92	17,620
2011	673,993.79	103,323	113,981	560,013	29.92	18,717
2012	693,392.63	86,951	95,921	597,472	30.80	19,398
2013	507,740.10	49,251	54,332	453,408	31.80	14,258
2014	641,955.61	44,038	48,580	593,376	32.80	18,091
2015	537,740.28	21,617	23,847	513,893	33.80	15,204
2016	545,660.00	7,094	7,826	537,834	34.75	15,477
	11,380,334.58	3,233,556	3,567,106	7,813,229		294,343
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 26.5						2.59

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 384 HOUSE REGULATOR INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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 35-S3						
NET SALVAGE PERCENT.. 0						
1956	4,098.01	3,959	4,098			
1957	11,093.12	10,672	11,093			
1958	8,984.62	8,607	8,985			
1959	10,504.99	10,019	10,505			
1960	6,886.85	6,539	6,887			
1961	5,770.97	5,453	5,771			
1962	6,336.36	5,958	6,336			
1963	9,429.02	8,823	9,429			
1964	13,020.68	12,117	13,021			
1965	14,473.42	13,394	14,473			
1966	13,305.16	12,245	13,305			
1967	17,106.02	15,650	17,106			
1968	26,484.46	24,078	26,484			
1969	37,452.06	33,835	37,452			
1970	54,867.42	49,224	54,867			
1971	52,330.89	46,619	52,331			
1972	30,594.70	27,046	30,595			
1973	41,286.72	36,214	40,965	322	4.30	75
1974	15,958.45	13,879	15,700	258	4.56	57
1975	25,717.11	22,168	25,077	640	4.83	133
1976	13,626.03	12,171	13,626			
1978	1,304.20	1,147	1,298	6	5.25	1
1979	41,749.48	36,243	41,000	749	5.69	132
1980	78,231.18	67,232	76,057	2,174	5.96	365
1981	103,540.67	88,010	99,563	3,978	6.25	636
1982	111,541.38	93,672	105,968	5,573	6.57	848
1983	94,279.56	78,129	88,385	5,895	6.91	853
1984	100,051.83	81,732	92,461	7,591	7.27	1,044
1985	116,774.98	93,922	106,251	10,524	7.64	1,377
1986	125,389.90	99,158	112,174	13,216	8.05	1,642
1987	160,772.64	124,856	141,245	19,528	8.46	2,308
1988	175,315.37	133,520	151,046	24,269	8.90	2,727
1989	145,310.01	107,965	122,137	23,173	9.48	2,444
1990	142,228.97	103,329	116,893	25,336	9.95	2,546
1991	135,142.11	95,829	108,408	26,734	10.43	2,563
1992	132,043.34	90,925	102,860	29,183	11.04	2,643
1993	112,250.88	74,916	84,750	27,501	11.67	2,357
1994	183,968.70	118,770	134,360	49,609	12.31	4,030
1995	147,476.46	91,907	103,971	43,505	12.95	3,359
1996	122,299.49	73,404	83,039	39,260	13.60	2,887
1997	182,246.23	104,737	118,485	63,761	14.37	4,437
1998	181,143.04	99,411	112,460	68,683	15.14	4,537

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 384 HOUSE REGULATOR INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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 35-S3						
NET SALVAGE PERCENT.. 0						
1999	139,857.78	73,076	82,669	57,189	15.92	3,592
2000	194,710.12	96,206	108,835	85,875	16.81	5,109
2001	229,158.59	107,040	121,091	108,068	17.59	6,144
2002	154,765.04	67,834	76,738	78,027	18.48	4,222
2003	133,893.06	54,615	61,784	72,109	19.48	3,702
	3,864,772.07	2,636,255	2,972,034	892,738		66,770
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 13.4						1.73

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT - OTHER  
THAN METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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 30-R0.5						
NET SALVAGE PERCENT.. 0						
1890	21.03	21	21			
1893	23.49	23	23			
1902	23.57	24	24			
1922	10.55	11	11			
1928	107.88	108	108			
1929	745.07	745	745			
1930	767.71	768	768			
1931	22.68	23	23			
1933	254.50	254	254			
1934	12.07	12	12			
1935	118.13	118	118			
1937	1,134.11	1,134	1,134			
1938	214.16	214	214			
1939	266.09	266	266			
1941	367.52	368	368			
1942	662.16	662	662			
1943	4,185.90	4,186	4,186			
1944	956.19	956	956			
1945	668.38	668	668			
1946	57.16	57	57			
1947	808.12	808	808			
1948	1,494.85	1,495	1,495			
1950	1,950.86	1,951	1,951			
1951	4,797.12	4,797	4,797			
1952	4,054.91	4,055	4,055			
1953	5,368.59	5,369	5,369			
1954	13,816.03	13,816	13,816			
1955	24,436.57	24,437	24,437			
1956	22,962.01	22,962	22,962			
1957	28,198.79	27,926	26,516	1,683	0.29	1,683
1958	27,379.79	26,668	25,322	2,058	0.78	2,058
1959	23,821.60	22,821	21,669	2,153	1.26	1,709
1960	33,331.54	31,409	29,823	3,509	1.73	2,028
1961	36,572.81	33,903	32,191	4,382	2.19	2,001
1962	13,687.40	12,483	11,853	1,834	2.64	695
1963	38,848.87	34,860	33,100	5,749	3.08	1,867
1964	32,054.85	28,304	26,875	5,180	3.51	1,476
1965	35,672.60	31,011	29,445	6,228	3.92	1,589
1966	27,886.27	23,861	22,656	5,230	4.33	1,208
1967	62,502.06	52,627	49,970	12,532	4.74	2,644
1968	56,315.10	46,667	44,311	12,004	5.14	2,335



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT - OTHER  
THAN METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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 30-R0.5						
NET SALVAGE PERCENT.. 0						
1969	54,418.49	44,369	42,129	12,289	5.54	2,218
1970	51,077.50	40,981	38,912	12,166	5.93	2,052
1971	110,724.33	87,361	82,951	27,773	6.33	4,388
1972	86,652.70	67,242	63,847	22,806	6.72	3,394
1973	44,449.18	33,900	32,189	12,260	7.12	1,722
1974	28,030.92	21,004	19,944	8,087	7.52	1,075
1975	25,225.25	18,557	17,620	7,605	7.93	959
1976	733.44	617	586	147	7.66	19
1977	2,877.04	2,393	2,272	605	7.98	76
1978	11,170.14	9,141	8,680	2,490	8.53	292
1979	35,353.37	28,573	27,131	8,222	8.88	926
1980	78,987.22	62,992	59,812	19,175	9.25	2,073
1981	115,290.74	91,057	86,460	28,831	9.43	3,057
1982	111,629.95	86,826	82,443	29,187	9.83	2,969
1983	73,145.37	55,971	53,145	20,000	10.25	1,951
1984	33,564.60	25,351	24,071	9,494	10.50	904
1985	45,319.07	33,600	31,904	13,415	10.96	1,224
1986	91,248.70	66,612	63,249	28,000	11.25	2,489
1987	19,683.64	14,070	13,360	6,324	11.74	539
1988	61,640.60	43,266	41,082	20,559	12.07	1,703
1989	71,691.99	49,338	46,847	24,845	12.42	2,000
1990	69,933.47	47,107	44,729	25,204	12.80	1,969
1991	141,061.30	92,861	88,173	52,888	13.19	4,010
1992	90,278.95	58,194	55,256	35,023	13.46	2,602
1993	122,301.21	76,756	72,881	49,420	13.90	3,555
1994	180,500.16	110,466	104,889	75,611	14.21	5,321
1995	131,115.03	78,066	74,125	56,990	14.55	3,917
1996	181,059.02	104,616	99,335	81,724	14.92	5,477
1997	127,885.41	71,514	67,904	59,981	15.31	3,918
1998	150,639.08	81,556	77,439	73,200	15.60	4,692
1999	62,678.47	32,750	31,097	31,581	15.92	1,984
2000	163,857.08	82,322	78,166	85,691	16.26	5,270
2001	18,443.74	8,899	8,450	9,994	16.53	605
2002	295,724.29	136,418	129,531	166,193	16.83	9,875
2003	519,007.64	227,689	216,194	302,814	17.17	17,636
2004	15,795.76	6,571	6,239	9,557	17.43	548
2005	65,976.33	25,909	24,601	41,375	17.65	2,344
2006	211,345.66	77,944	74,009	137,337	17.83	7,703
2007	243,677.74	83,752	79,524	164,154	17.98	9,130
2008	241,893.23	76,970	73,084	168,809	18.04	9,357
2009	142,079.33	41,302	39,217	102,862	18.09	5,686

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT - OTHER  
THAN METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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 30-R0.5						
NET SALVAGE PERCENT.. 0						
2010	310,650.05	81,328	77,222	233,428	18.09	12,904
2011	209,682.61	48,500	46,052	163,631	18.00	9,091
2012	212,178.05	42,181	40,051	172,127	17.80	9,670
2013	296,367.28	48,604	46,150	250,217	17.42	14,364
2014	191,202.36	24,130	22,912	168,290	16.74	10,053
2015	219,559.66	18,311	17,387	202,173	15.56	12,993
2016	135,777.00	4,671	4,435	131,342	12.87	10,205
	6,410,163.24	3,135,456	2,981,725	3,428,438		242,202
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						14.2 3.78

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 387 OTHER EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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 30-R0.5						
NET SALVAGE PERCENT.. 0						
1941	38.38	38	38			
1942	67.31	67	67			
1950	90.19	90	90			
1955	4,288.05	4,288	4,288			
1957	14,374.70	14,236	14,375			
1959	188.29	180	187	1	1.26	1
1962	7,626.48	6,955	7,207	419	2.64	159
1967	445.13	375	389	56	4.74	12
1972	7,910.24	6,138	6,361	1,549	6.72	231
1981	13,548.93	10,701	11,089	2,460	9.43	261
1985	14,556.64	10,792	11,183	3,374	10.96	308
1992	2,228.63	1,437	1,489	740	13.46	55
2010	68,488.09	17,930	18,580	49,908	18.09	2,759
	133,851.06	73,227	75,343	58,508		3,786
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						15.5 2.83

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 387.4 OTHER EQUIPMENT - CUSTOMER INFORMATION SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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 25-R2.5						
NET SALVAGE PERCENT.. 0						
1973	917.13	889	763	154	0.78	154
1974	11,561.27	11,076	9,503	2,058	1.05	1,960
1975	3,189.09	3,019	2,590	599	1.33	450
1976	6,308.81	6,094	5,229	1,080	1.42	761
1980	1,144.78	1,076	923	222	2.34	95
1983	10,695.21	9,829	8,433	2,262	2.95	767
1984	4,730.23	4,309	3,697	1,033	3.17	326
1985	27,353.09	24,664	21,162	6,191	3.43	1,805
1986	61,596.14	54,894	47,100	14,496	3.71	3,907
1987	40,005.58	35,305	30,292	9,714	3.92	2,478
1989	3,425.59	2,939	2,522	904	4.53	200
1990	37,952.71	31,983	27,442	10,511	4.93	2,132
1991	31,594.95	26,180	22,463	9,132	5.26	1,736
1992	6,510.50	5,277	4,528	1,982	5.70	348
1993	1,718.09	1,364	1,170	548	6.08	90
1994	4,082.11	3,157	2,709	1,373	6.57	209
2000	50,178.60	31,387	26,931	23,248	9.83	2,365
2001	142,467.12	84,996	72,928	69,539	10.42	6,674
2003	2,326.24	1,245	1,068	1,258	11.65	108
2004	119,576.43	60,135	51,597	67,979	12.27	5,540
2005	238,393.08	111,854	95,973	142,420	12.91	11,032
2006	8,389.16	3,644	3,127	5,262	13.56	388
2007	22,252.02	8,885	7,623	14,629	14.17	1,032
2008	0.11					
2009	13,302.75	4,302	3,691	9,612	15.52	619
2010	58,684.63	16,684	14,315	44,370	16.16	2,746
2011	109,605.60	26,722	22,928	86,678	16.80	5,159
2012	163,197.40	33,015	28,328	134,869	17.42	7,742
2013	684,641.61	108,995	93,520	591,122	18.04	32,767
2014	2,020,467.58	232,960	199,884	1,820,584	18.55	98,145
2015	448,075.50	31,231	26,797	421,278	18.91	22,278
	4,334,343.11	978,110	839,236	3,495,107		214,013

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.3 4.94

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 387.5 OTHER EQUIPMENT - GPS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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-S3						
NET SALVAGE PERCENT.. 0						
2014	2,006,009.00	520,158	334,863	1,671,146	6.90	242,195
2015	43,563.00	6,630	4,268	39,295	7.89	4,980
2016	755,914.00	37,191	23,943	731,971	8.85	82,709
	2,805,486.00	563,979	363,074	2,442,412		329,884
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.4						11.76

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 390.1 STRUCTURES AND IMPROVEMENTS - COMMUNICATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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-R2.5						
NET SALVAGE PERCENT.. 0						
1955	1,170.54	1,075	1,126	45	3.28	14
1958	192.08	173	181	11	3.93	3
1959	2,129.94	1,908	1,999	131	4.16	31
1971	17,971.09	14,651	15,351	2,620	7.39	355
1983	7,872.27	5,814	6,092	1,780	11.83	150
1984	3,449.87	2,505	2,625	825	12.23	67
1987	6,786.87	4,612	4,832	1,955	13.87	141
1988	9,428.54	6,243	6,541	2,888	14.50	199
1989	9,423.51	6,097	6,388	3,036	14.96	203
1990	45,343.53	28,507	29,868	15,476	15.60	992
1991	16,302.22	9,944	10,419	5,883	16.25	362
	120,070.46	81,529	85,422	34,648		2,517
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						13.8 2.10

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 391.1 OFFICE FURNITURE AND EQUIPMENT - FURNITURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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	260,945.93	260,946	260,946			
1997	470,390.27	456,669	462,680	7,710	0.58	7,710
1998	480,955.49	442,878	448,707	32,248	1.58	20,410
1999	80,599.29	70,188	71,112	9,487	2.58	3,677
2000	95,723.34	78,573	79,607	16,116	3.58	4,502
2001	173,686.96	133,883	135,645	38,042	4.58	8,306
2002	94,356.55	68,015	68,910	25,447	5.58	4,560
2003	95,837.52	64,291	65,137	30,701	6.58	4,666
2004	32,484.97	20,168	20,434	12,051	7.58	1,590
2005	522.52	298	302	221	8.58	26
2007	4,181.56	1,969	1,995	2,187	10.58	207
2010	7,734.00	2,481	2,514	5,220	13.58	384
2011	12,031.56	3,259	3,302	8,730	14.58	599
2012	1,550.11	342	347	1,203	15.58	77
2014	565,919.21	68,380	69,280	496,639	17.58	28,250
2015	1,403,013.56	99,375	100,682	1,302,332	18.58	70,093
	3,779,932.84	1,771,715	1,791,600	1,988,333		155,057
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 12.8						4.10

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 391.11 OFFICE FURNITURE AND EQUIPMENT - EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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						
2011	24,427.00	8,821	13,746	10,681	9.58	1,115
	24,427.00	8,821	13,746	10,681		1,115
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						9.6 4.56



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 391.12 OFFICE FURNITURE AND EQUIPMENT - INFORMATION SYSTEMS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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	1,898,783.69	1,898,784	1,898,784			
2013	299,109.66	204,391	203,428	95,682	1.58	60,558
2014	374,975.85	181,237	180,383	194,593	2.58	75,424
2015	844,125.38	239,166	238,038	606,087	3.58	169,298
	3,416,994.58	2,523,578	2,520,633	896,362		305,280
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						2.9 8.93

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 392 TRANSPORTATION EQUIPMENT - TRAILERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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						
2002	5,208.71	5,006	3,806	1,403	0.58	1,403
2004	70,904.01	58,693	44,618	26,286	2.58	10,188
2011	3,781.00	1,365	1,038	2,743	9.58	286
2012	14,849.79	4,372	3,323	11,527	10.58	1,090
2013	2,789.00	635	483	2,306	11.58	199
	97,532.51	70,071	53,268	44,265		13,166
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 3.4						13.50

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 393 STORES EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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	2,299.92	2,300	2,300			
1997	939.35	912	939			
1998	13,435.25	12,372	13,436			
	16,674.52	15,584	16,675			
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						0.0 0.00

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 394 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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						
1991	158,165.95	158,166	158,166			
1992	186,713.88	182,358	186,714			
1993	413,416.69	387,235	397,151	16,266	1.58	10,295
1994	566,669.51	508,116	521,127	45,543	2.58	17,652
1995	162,417.47	139,138	142,701	19,716	3.58	5,507
1996	552,198.39	450,964	462,512	89,686	4.58	19,582
1997	1,161,874.46	902,393	925,501	236,373	5.58	42,361
1998	383,704.26	282,663	289,901	93,803	6.58	14,256
1999	191,341.50	133,302	136,715	54,626	7.58	7,207
2000	296,716.81	194,845	199,834	96,883	8.58	11,292
2001	186,888.81	115,249	118,200	68,689	9.58	7,170
2002	307,053.93	177,069	181,603	125,451	10.58	11,857
2003	266,861.99	143,217	146,884	119,978	11.58	10,361
2004	366,999.55	182,278	186,946	180,054	12.58	14,313
2005	79,725.36	36,408	37,340	42,385	13.58	3,121
2006	179,958.05	74,983	76,903	103,055	14.58	7,068
2007	847,845.86	319,358	327,536	520,310	15.58	33,396
2008	1,181,797.10	397,876	408,065	773,732	16.58	46,667
2009	278,442.30	82,605	84,720	193,722	17.58	11,019
2010	746,136.58	191,511	196,415	549,722	18.58	29,587
2011	626,616.50	135,769	139,246	487,370	19.58	24,891
2012	870,830.41	153,850	157,790	713,040	20.58	34,647
2013	784,168.63	107,172	109,916	674,253	21.58	31,244
2014	894,641.85	86,485	88,700	805,942	22.58	35,693
2015	1,799,274.66	101,965	104,576	1,694,699	23.58	71,870
2016	641,384.00	11,757	12,058	629,326	24.54	25,645
	14,131,844.50	5,656,732	5,797,220	8,334,624		526,701
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 15.8						3.73

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 394.12 TOOLS, SHOP AND GARAGE EQUIPMENT - CNG FACILITIES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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 12-S1.5						
NET SALVAGE PERCENT.. 0						
1989	99,674.00	99,674	99,674			
1990	2,097.64	2,098	2,098			
1991	24,694.44	24,694	24,694			
1993	95,944.79	95,935	95,945			
1994	117,928.20	116,584	117,928			
1995	1,135,467.56	1,106,513	1,135,468			
1996	280,092.23	269,337	280,092			
1998	98,401.65	91,878	98,402			
1999	18,450.18	16,935	18,450			
2001	80,747.15	71,203	80,535	212	2.07	102
	1,953,497.84	1,894,851	1,953,286	212		102

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 2.1 0.01

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 395 LABORATORY EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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	13,945.83	13,946	13,946			
1997	8,811.95	8,555	8,457	355	0.58	355
1998	4,710.24	4,337	4,287	423	1.58	268
2000	2,990.39	2,455	2,427	563	3.58	157
2002	1,118.18	806	797	321	5.58	58
2011	19,084.33	5,169	5,109	13,975	14.58	959
	50,660.92	35,268	35,023	15,638		1,797

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 8.7 3.55

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 396 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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 12-L3						
NET SALVAGE PERCENT.. 0						
1990	14,666.07	14,528	14,666			
1991	77,918.78	76,446	77,919			
1992	7,619.70	7,405	7,620			
1993	2,619.06	2,521	2,619			
1994	49,419.28	47,082	49,419			
1995	102,911.30	96,973	102,911			
1997	46,192.45	42,335	46,192			
1999	176,977.59	157,191	175,666	1,312	2.19	599
2000	424,416.34	369,964	413,447	10,969	2.42	4,533
2001	23,340.60	19,935	22,278	1,063	2.63	404
2002	21,599.55	18,092	20,218	1,382	2.80	494
2003	458,375.61	375,776	419,943	38,433	2.95	13,028
2011	25,036.41	12,193	13,626	11,410	5.71	1,998
2014	4,400.00	1,000	1,118	3,282	8.22	399
	1,435,492.74	1,241,441	1,367,642	67,851		21,455
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						3.2 1.49

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 397.10

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
2006	168,830.82	168,831	163,625	5,206		
	168,830.82	168,831	163,625	5,206		
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						0.0 0.00



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 397.5 COMMUNICATION EQUIPMENT - TELEMETERING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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 17-R3						
NET SALVAGE PERCENT.. 0						
1991	226,631.93	220,626	179,546	47,086	0.69	47,086
1992	170,079.95	163,617	133,152	36,928	0.96	36,928
1995	11,194.73	10,357	8,429	2,766	1.73	1,599
1996	136,517.86	124,313	101,166	35,352	2.00	17,676
1997	72,647.48	65,027	52,919	19,728	2.28	8,653
1998	6,162.21	5,391	4,387	1,775	2.64	672
1999	94,035.80	80,250	65,307	28,729	2.99	9,608
2000	256,081.39	211,882	172,430	83,651	3.42	24,459
2001	115,190.03	91,991	74,862	40,328	3.89	10,367
2002	104,623.05	80,089	65,176	39,447	4.42	8,925
2004	2,975.42	2,054	1,672	1,303	5.57	234
2011	12,227.55	4,185	3,406	8,822	10.41	847
2012	1,384.24	392	319	1,065	11.18	95
2013	6,769.63	1,504	1,224	5,546	11.97	463
2015	7,917.33	751	611	7,306	13.53	540
2016	766,872.00	24,080	19,596	747,276	14.14	52,848
	1,991,310.60	1,086,509	884,202	1,107,109		221,000
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.0						11.10

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 398 MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 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						
2001	38,544.89	38,545	38,545			
2002	9,171.96	8,815	8,002	1,170	0.58	1,170
2003	7,484.08	6,694	6,076	1,408	1.58	891
2004	11,186.58	9,260	8,405	2,782	2.58	1,078
2005	23,458.02	17,854	16,206	7,252	3.58	2,026
2006	8,228.13	5,714	5,187	3,041	4.58	664
2007	136.82	86	78	59	5.58	11
2008	2,264.03	1,270	1,153	1,111	6.58	169
2009	11,311.50	5,593	5,077	6,234	7.58	822
2010	4,537.40	1,941	1,762	2,775	8.58	323
2011	63,192.60	22,819	20,713	42,480	9.58	4,434
2012	129,294.07	38,069	34,556	94,738	10.58	8,954
2013	14,421.00	3,285	2,982	11,439	11.58	988
2014	113,751.86	18,327	16,636	97,116	12.58	7,720
2015	381,868.01	36,064	32,735	349,133	13.58	25,709
2016	41,670.00	1,273	1,156	40,514	14.54	2,786
	860,520.95	215,609	199,269	661,252		57,745

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 11.5 6.71

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**PART VIII. EXPERIENCED AND ESTIMATED  
NET SALVAGE**

COLUMBIA GAS OF PENNSYLVANIA, INC.

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED  
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
<b>2011 TRANSACTION YEAR</b>				
362.10	2,955.95	11,780.05		11,780.05-
374.40	2,451.03			
375.34	8,426.70	12,279.55		12,279.55-
375.70	4,917.10			
376.00	6,094,674.85	1,269,063.41	1,541.00	1,267,522.41-
378.00	316,954.17	59,829.10		59,829.10-
380.00	4,301,280.30	4,313,652.88		4,313,652.88-
381.00	688,641.33		759.60	759.60
382.00	93,240.91			
383.00	12,047.13			
384.00	12,350.94			
385.00	179,661.32	31,592.63		31,592.63-
387.00		26,983.46		26,983.46-
387.40		208.04		208.04-
392.00			7,201.42	7,201.42
396.00			43,731.96	43,731.96
	11,717,601.73	5,725,389.12	53,233.98	5,672,155.14-
<b>2012 TRANSACTION YEAR</b>				
362.10		6,457.05		6,457.05-
374.40	15,595.34	260.16		260.16-
375.34	32,534.20	17,416.11		17,416.11-
375.60	22.40			
375.70	6,691.59	5,103.09		5,103.09-
376.00	6,717,810.62	886,996.12		886,996.12-
378.00	261,314.24	18,887.95		18,887.95-
380.00	5,021,027.74	2,192,533.99		2,192,533.99-
381.00	574,916.43	305.85	25,333.32	25,027.47
382.00	71,791.00			
383.00	12,740.78			
385.00	129,670.47	23,198.35		23,198.35-
387.40	18,518.39	55.60		55.60-
396.00	61,173.74			
	12,923,806.94	3,151,214.27	25,333.32	3,125,880.95-

COLUMBIA GAS OF PENNSYLVANIA, INC.

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED  
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
<b>2013 TRANSACTION YEAR</b>				
351.20		608.46		608.46-
362.10		40,496.89		40,496.89-
374.20	1,583.70	57,633.75		57,633.75-
374.40	4,573.73	4,911.96		4,911.96-
375.34	21,986.97	22,427.70		22,427.70-
375.60		1,091.39		1,091.39-
376.00	7,496,191.99	691,743.41	2,051.59	689,691.82-
378.00	216,579.21	216,795.76		216,795.76-
380.00	5,734,991.74	1,750,826.78		1,750,826.78-
381.00	421,072.33	23.20	6,554.08	6,530.88
382.00	91,732.07			
383.00	9,962.93			
385.00	250,693.05	51,158.61		51,158.61-
387.00	4,694.90			
387.40	7,558.85	392.50		392.50-
392.00	118,202.85		44,482.18	44,482.18
396.00	349,409.40		104,669.48	104,669.48
397.50	23,451.88			
	14,752,685.60	2,838,110.41	157,757.33	2,680,353.08-
<b>2014 TRANSACTION YEAR</b>				
362.10		461,689.98		461,689.98-
374.20	104.80	211,267.49-		211,267.49
374.40	24,414.93	21.91		21.91-
375.34	59,724.17	20,674.45		20,674.45-
376.00	7,888,751.50	1,281,289.43		1,281,289.43-
378.00	433,323.74	185,399.17		185,399.17-
379.10	12,676.85	91.84		91.84-
380.00	6,142,996.19	4,690,972.30		4,690,972.30-
381.00	393,244.36			
382.00	107,002.51			
383.00	8,132.91			
385.00	232,189.97	63,312.71		63,312.71-
387.40	27,680.85	933.57		933.57-
392.00	10,545.15			
397.50	28,765.62			
	15,369,553.55	6,493,117.87		6,493,117.87-

COLUMBIA GAS OF PENNSYLVANIA, INC.

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				
362.10		56,875.48		56,875.48-
374.40	15,740.42	2,936.76		2,936.76-
375.34	28,958.81	25,529.72		25,529.72-
375.70		22,140.00		22,140.00-
376.00	8,995,681.23	1,442,959.23	20,828.00	1,422,131.23-
378.00	306,189.60	122,225.11		122,225.11-
380.00	4,918,091.84	2,822,703.18		2,822,703.18-
381.00	370,041.70			
382.00	144,324.79			
383.00	13,105.34			
385.00	198,032.94	31,831.17		31,831.17-
387.40	26,673.61	1,060.39		1,060.39-
392.00	12,904.19			
397.50	29,824.98	29,402.56		29,402.56-
	15,059,569.45	4,557,663.60	20,828.00	4,536,835.60-
<b>TOTAL</b>	<b>69,823,217.27</b>	<b>22,765,495.27</b>	<b>257,152.63</b>	<b>22,508,342.64-</b>



## **2017 DEPRECIATION STUDY**

**CALCULATED ANNUAL DEPRECIATION  
ACCRUALS RELATED TO GAS PLANT  
AS OF DECEMBER 31, 2017**

*Prepared by:*



*Excellence Delivered As Promised*

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**Pittsburgh, Pennsylvania**

**2017 DEPRECIATION STUDY**

**CALCULATED ANNUAL DEPRECIATION ACCRUALS  
RELATED TO GAS PLANT  
AS OF DECEMBER 31, 2017**

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





*Excellence Delivered As Promised*

March 3, 2016

Columbia Gas of Pennsylvania, Inc.  
121 Champion Way, Suite 100  
Canonsburg, PA 15317

Ladies and Gentlemen:

Pursuant to your request, we have determined the annual depreciation accruals applicable to gas plant as of December 31, 2017. The results of our study as of November 30, 2016 are presented in our report titled "2016 Depreciation Study - Calculated Annual Depreciation Accruals Related to Gas Plant as of November 30, 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

061005



**TABLE OF CONTENTS**

**PART I. RESULTS OF STUDY** ..... I-1  
Description of Summary Tabulations ..... I-2  
Description of Detailed Tabulations ..... I-2

Table 1 Estimated Survivor Curves, Original Cost, Book Reserve  
and Calculated Annual Depreciation Accruals Related  
to Gas Plant as of December 31, 2017 ..... I-3

Table 2 Bringforward to December 31, 2017, of the Book Reserve  
as of November 30, 2016 ..... I-6

Table 3 Calculation of Depreciation Accruals for the Thirteen Months  
Ended December 31, 2017 ..... I-8

Table 4 Amortization of Experienced and Estimated Net Salvage ..... I-10

**PART II. DETAILED DEPRECIATION CALCULATIONS** ..... II-1  
Cumulative Depreciated Original Cost..... II-2  
Utility Plant in Service ..... II-7

**PART III. EXPERIENCED AND ESTIMATED NET SALVAGE**..... III-1

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## PART I. RESULTS OF STUDY

**COLUMBIA GAS OF PENNSYLVANIA, INC.  
DEPRECIATION STUDY**

**PART I. RESULTS OF STUDY**

**DESCRIPTION OF SUMMARY TABULATIONS**

Tables 1 through 4 presented on pages I-3 through I-10 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 thirteen months ended December 31, 2017. Table 4 presents the annual amortization of experienced and estimated net salvage based on the period 2012 through 2016.

**DESCRIPTION OF DETAILED TABULATIONS**

The supporting data for the depreciation calculations are presented in account sequence in the section beginning on page II-8. 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 2012 through 2016, beginning on pages III-2 through III-4.

COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 1. ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF DECEMBER 31, 2017

DEPRECIABLE GROUP (1)	SURVIVOR CURVE (2)	ORIGINAL COST AS OF DECEMBER 31, 2017 (3)	BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	CALCULATED ANNUAL ACCRUAL AMOUNT (6)	RATE (7)=(6)/(3)	COMPOSITE REMAINING LIFE (8)=(6)/(6)
<b>DEPRECIABLE PLANT</b>							
<b>UNDERGROUND STORAGE PLANT</b>							
350.2	RIGHTS-OF-WAY	1,932.08	1,931	1	0	-	-
351	COMPRESSOR STATION STRUCTURES	3,180,888.99	1,339,867	1,851,222	249,574	7.82	7.4
<b>WELLS</b>							
352.01	CONSTRUCTION	799,133.73	799,118	16	2	-	8.0
352.02	EQUIPMENT	189,679.67	189,680	0	0	-	-
	TOTAL ACCOUNT 352	987,813.40	987,798	16	2	-	-
352.1	STORAGE LEASEHOLDS AND RIGHTS	206,940.78	206,932	9	1	-	7.5
353	LINES	405,287.78	405,286	0	0	-	-
354	COMPRESSOR STATION EQUIPMENT	962,284.67	680,325	281,960	38,877	4.02	7.3
355	MEASURING AND REGULATING EQUIPMENT	123,010.01	123,010	0	0	-	-
	TOTAL UNDERGROUND STORAGE PLANT	6,868,167.71	3,724,961	2,133,208	288,264	4.92	-
<b>DISTRIBUTION PLANT</b>							
<b>LAND AND LAND RIGHTS</b>							
374.4	LAND RIGHTS	2,832,846.44	883,587	2,149,059	49,497	1.75	43.4
374.5	RIGHTS-OF-WAY	3,239,801.77	1,647,478	1,592,124	41,877	1.29	38.0
	TOTAL ACCOUNT 374	6,072,248.21	2,331,065	3,741,183	91,374	1.50	-
<b>STRUCTURES AND IMPROVEMENTS</b>							
375.34	MEASURING AND REGULATING	5,530,327.48	1,406,360	4,123,967	117,792	2.13	35.0
375.6	INDUSTRIAL MEASURING AND REGULATING	87,869.84	74,808	12,862	808	0.92	16.0
375.7	OTHER DISTRIBUTION SYSTEMS	5,534,283.03	1,842,427	3,691,835	179,755	3.25	20.5
	DISTRIBUTION SYSTEM STRUCTURES	2,287,336.48	745,406	1,541,932	74,160	3.24	20.8
	OTHER BUILDINGS	7,821,601.51	2,587,833	5,233,767	253,915	3.25	-
	TOTAL ACCOUNT 375.70	16,515.17	6,868	9,649	328	1.97	29.6
375.8	COMMUNICATION STRUCTURES	13,458,114.00	4,075,867	9,380,245	372,839	2.77	-
	TOTAL ACCOUNT 375	-	-	-	-	-	-
376	MAINS	412,816.21	316,848	95,968	14,024	3.40	6.8
	CAST IRON	53,098,418.11	39,002,735	14,095,883	1,865,970	3.51	7.6
	BARE STEEL	1,394,646,085.69	164,880,211	1,229,965,875	27,982,889	2.01	43.9
	OTHER	-	-	-	-	-	-
	TOTAL ACCOUNT 376	1,448,157,320.01	203,999,794	1,244,157,528	29,872,883	2.06	-

COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 1. ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF DECEMBER 31, 2017

	DEPRECIABLE GROUP (1)	SURVIVOR CURVE (2)	ORIGINAL COST AS OF DECEMBER 31, 2017 (3)		BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	CALCULATED ANNUAL ACCRUAL RATE (7)=(6)/(3)		COMPOSITE REMAINING LIFE (8)=(9)/(6)
							AMOUNT (6)		
378	MEASURING AND REGULATING EQUIPMENT - GENERAL	45-R0.5	47,544,942.69	11,283,278	36,261,665	1,515,802	3.19	23.9	
378.1	MEASURING AND REGULATING EQUIPMENT - CITY GATE	35-S2.5	141,117.10	98,046	43,071	4,193	2.97	10.3	
380	SERVICES								
	BARE STEEL	50-R0.5	700,876.82	623,394	77,485	11,622	1.66	6.7	
	OTHER	50-R0.5	489,681,663.44	121,654,220	368,027,443	13,895,695	2.84	26.5	
	TOTAL ACCOUNT 380		490,382,542.26	122,277,614	368,104,928	13,907,317	2.84		
381	METERS								
381.1	METERS - AMR	43-S1.5	37,714,613.39	16,508,949	21,205,664	913,408	2.42	23.2	
382	METER INSTALLATIONS	15-S2.5	24,289,053.13	10,448,842	13,840,211	1,743,495	7.18	7.9	
383	HOUSE REGULATORS	55-R2.5	37,776,263.47	12,548,434	25,227,829	732,417	1.94	34.4	
384	HOUSE REGULATOR INSTALLATIONS	40-S2	12,047,373.58	3,829,549	8,217,825	313,185	2.60	26.2	
385	INDUSTRIAL MEASURING AND REGULATING EQUIPMENT - OTHER THAN METERS	35-S3	3,984,772.07	3,044,466	820,306	64,393	1.67	12.7	
		30-R0.5	6,572,464.24	3,265,874	3,306,590	227,110	3.46	14.8	
387	OTHER EQUIPMENT								
387.4	GENERAL	30-R0.5	133,851.06	79,896	53,955	3,371	2.52	18.0	
387.5	CUSTOMER INFORMATION SERVICES	25-R2.5	4,334,343.11	1,071,728	3,262,615	204,012	4.71	16.0	
	GPS EQUIPMENT	10-S3	4,342,925.00	811,351	3,531,574	490,955	11.30	7.2	
	TOTAL ACCOUNT 387		8,811,119.17	1,882,975	6,848,144	698,338	7.93		
	TOTAL DISTRIBUTION PLANT		2,136,829,943.32	395,864,753	1,741,175,187	50,456,754	2.36		
	GENERAL PLANT								
390.1	STRUCTURES AND IMPROVEMENTS - COMMUNICATIONS	40-R2.5	120,070.46	88,154	31,916	2,419	2.01	13.2	
391.1	OFFICE FURNITURE AND EQUIPMENT								
391.11	FURNITURE	20-SQ	3,046,596.64	1,216,206	1,832,389	142,003	4.66	12.9	
391.12	INFORMATION SYSTEMS	15-SQ	24,427.00	14,953	8,474	1,115	4.58	8.5	
	TOTAL ACCOUNT 391	5-SQ	1,518,210.89	775,769	742,422	386,111	25.56	1.9	
			4,591,234.53	2,008,950	2,584,285	531,239	11.57		
392	TRANSPORTATION EQUIPMENT - TRAILERS	15-SQ	92,323.80	52,537	39,787	17,765	19.24	2.2	
393	STORES EQUIPMENT	20-SQ	13,435.25	13,436	0	0	-	-	
394	TOOLS, SHOP AND GARAGE EQUIPMENT								
394.12	EQUIPMENT	25-SQ	15,029,765.67	6,040,266	8,989,480	568,047	3.78	15.8	
	CNG FACILITIES	12-S1.5	1,953,497.84	1,953,498	0	0	-	-	
	TOTAL ACCOUNT 394		16,983,263.51	7,993,764	8,989,480	568,047	3.34		

COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 1. ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF DECEMBER 31, 2017

DEPRECIABLE GROUP (1)	SURVIVOR CURVE (2)	ORIGINAL COST AS OF DECEMBER 31, 2017 (3)	BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	CALCULATED ANNUAL ACCRUAL AMOUNT (6)	CALCULATED ACCURAL RATE (7)=(6)/(3)	COMPOSITE REMAINING LIFE (8)=(5)/(6)
395	20-SQ	27,903.14	13,885	14,218	1,539	5.52	9.2
396	12-L3	1,435,492.74	1,387,406	68,087	23,890	1.66	2.9
397.5	17-R3	3,242,485.60	1,200,446	2,042,040	191,377	5.90	10.7
398	15-SQ	866,975.10	213,354	653,621	60,379	6.96	10.8
<b>TOTAL GENERAL PLANT</b>		<b>27,373,184.13</b>	<b>12,949,752</b>	<b>14,423,434</b>	<b>1,386,845</b>	<b>5.10</b>	
<b>SUBTOTAL DEPRECIABLE PLANT</b>		<b>2,170,061,286.16</b>	<b>412,328,466</b>	<b>1,767,731,829</b>	<b>52,141,663</b>	<b>2.40</b>	
<b>AMORTIZABLE PLANT</b>							
303							
362.1		36,337,249.65	9,799,828 (2,266,471)	28,537,422	4,748,209	**	
374.2		477,118.40	146,180				
375.71		4,516,130.17	1,080,296	3,437,834	501,461	**	
<b>SUBTOTAL AMORTIZABLE PLANT</b>		<b>41,332,498.22</b>	<b>8,769,843</b>	<b>29,976,256</b>	<b>6,249,690</b>		
<b>NONDEPRECIABLE PLANT</b>							
<b>TOTAL GAS PLANT</b>		<b>2,211,666,196.46</b>	<b>421,089,299</b>	<b>1,767,707,086</b>	<b>57,391,343</b>		

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

\*\* Accrual rate based on individual asset amortization.

COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 2. BRINGFORWARD TO DECEMBER 31, 2017, OF THE BOOK RESERVE AS OF NOVEMBER 30, 2016

ACCOUNT	BOOK RESERVE AS OF NOVEMBER 30, 2015	DEPRECIATION ACCRUALS	AMORTIZATION OF NET SALVAGE	PROJECTED RETIREMENTS	PROJECTED GROSS SALVAGE	PROJECTED COST OF REMOVAL	ACQUISITIONS	ADJUSTMENTS	RESERVE AT END OF PERIOD	BOOK RESERVE AS A PERCENT OF ORIGINAL COST
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
350.20	1,931								1,931	99.94
351.20	1,067,631	271,704	132						1,339,667	41.98
362.01	799,118								799,118	100.00
362.02	169,680								169,680	100.00
362.10	206,932								206,932	100.00
363.00	405,288								405,288	100.00
364.00	651,798	34,034		5,507					690,325	70.70
365.00	123,010								123,010	100.00
374.40	657,837	50,764	2,341	24,208		3,147			693,987	24.13
374.50	1,601,503	45,975							1,647,478	50.85
375.34	1,327,973	121,687	23,477	41,394		25,383			1,408,360	26.43
375.60	73,641	931	236						74,808	85.33
375.70	2,332,164	277,127	16,762	24,038		14,182			2,567,833	33.09
375.80	6,508	358							6,866	41.57
376.00	194,534,932	29,024,466	1,368,098	19,065,726		2,691,876			203,998,794	14.09
376.00	10,020,157	1,601,128	134,333	342,570		149,770			11,263,278	23.69
379.10	93,180	4,846	20						98,046	69.49
380.00	111,536,567	14,361,044	2,973,442	4,268,441	2,706	2,324,998			122,277,814	24.94
381.00	15,673,710	960,103	(7,073)	140,497					16,506,949	43.77
381.10	6,592,161	1,912,497		45,836					10,448,842	43.02
382.00	11,909,425	777,512		138,503					12,548,434	33.22
383.00	3,867,106	327,611		65,168					3,828,549	31.79
384.00	2,972,034	72,432							3,044,466	78.77
385.00	2,961,725	265,538		15,857		3,317			3,265,874	49.89
387.00	75,343	4,104	37,786						79,866	59.69
387.40	839,236	231,960	450						1,071,726	24.73
387.60	363,074	449,277	532						811,361	19.88
390.10	65,422	2,732							68,154	73.42
391.10	1,791,600	155,944		731,336					1,216,208	39.89
391.11	13,746	1,207							14,953	61.22
391.12	2,520,633	153,939	(9,757)	1,698,784					775,769	51.10
392.00	53,268	14,235		5,209					62,537	58.91
393.00	16,875			3,239					13,436	100.01
394.00	5,787,220	587,946		1,698,784					6,040,296	40.19
394.12	1,963,286	102		3,239					1,963,488	100.00
395.00	35,023	1,420		22,758				(110)	13,895	49.04
396.00	1,367,642	23,171	(23,407)	166,831				(5,206)	1,367,406	95.26
397.10	163,625								0	0.00
397.50	664,202	309,873	6,371						1,200,446	37.02
398.00	199,289	61,802		47,717					213,354	24.81
	387,454,395	52,928,469	4,543,741	27,400,498	2,706	5,202,674	0	(5,316)	412,329,456	



COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 2. BRINGFORWARD TO DECEMBER 31, 2017, OF THE BOOK RESERVE AS OF NOVEMBER 30, 2016

(1) ACCOUNT	(2) BOOK RESERVE AS OF NOVEMBER 30, 2016	(3) DEPRECIATION ACCRUALS	(4) AMORTIZATION OF NET SALVAGE	(5) PROJECTED RETIREMENTS	(6) PROJECTED GROSS SALVAGE	(7) PROJECTED COST OF REMOVAL	(8) ACQUISITIONS	(9) ADJUSTMENTS	(10) RESERVE AT END OF PERIOD	(11) BOOK RESERVE AS A PERCENT OF ORIGINAL COST
AMORTIZABLE PLANT										
303.00	8,753,916	3,309,641		2,283,729		963,491			9,799,828	28.97
362.10	(1,688,454)		383,474						(2,266,471)	
374.20	179,478		(33,288)						146,190	30.84
375.71	740,882	377,189		37,775					1,080,298	23.91
	7,987,822	3,686,830	350,186	2,301,504	0	963,491	0	0	8,759,843	
TOTAL	395,442,217	58,613,299	4,883,927	29,702,002	2,706	6,168,165	0	(5,316)	421,089,299	

COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 3. CALCULATION OF DEPRECIATION ACCRUALS FOR THE THIRTEEN MONTHS ENDED DECEMBER 31, 2017

DEPRECIABLE GROUP		ORIGINAL COST AS OF NOVEMBER 30, 2016	ORIGINAL COST AS OF DECEMBER 31, 2017	COMPOSITE ACCRUAL RATE	ANNUAL ACCRUAL AMOUNT
(1)		(2)	(3)	(4)	(5)*
<b>DEPRECIABLE PLANT</b>					
<b>UNDERGROUND STORAGE PLANT</b>					
350.2	RIGHTS-OF-WAY	1,932	1,932	-	0
351	COMPRESSOR STATION STRUCTURES	3,190,889	3,190,889	7.88	271,704
<b>WELLS</b>					
352.01	CONSTRUCTION	799,134	799,134	-	0
352.02	EQUIPMENT	188,880	188,880	-	0
	<b>TOTAL ACCOUNT 352</b>	<b>987,813</b>	<b>987,813</b>		<b>0</b>
352.1	STORAGE LEASEHOLDS AND RIGHTS	208,941	208,941	-	0
353	LINES	405,288	405,288	-	0
354	COMPRESSOR STATION EQUIPMENT	905,915	982,200	3.37	34,034
355	MEASURING AND REGULATING EQUIPMENT	123,010	123,010	-	0
	<b>TOTAL UNDERGROUND STORAGE PLANT</b>	<b>5,801,788</b>	<b>5,858,073</b>	<b>4.85</b>	<b>305,738</b>
<b>DISTRIBUTION PLANT</b>					
<b>LAND AND LAND RIGHTS</b>					
374.4	LAND RIGHTS	2,584,852	2,935,758	1.74	50,764
374.5	RIGHTS-OF-WAY	3,239,802	3,239,802	1.31	45,975
	<b>TOTAL ACCOUNT 374</b>	<b>5,824,454</b>	<b>6,175,360</b>	<b>1.60</b>	<b>96,739</b>
<b>STRUCTURES AND IMPROVEMENTS</b>					
375.34	MEASURING AND REGULATING	5,106,608	5,302,252	2.12	121,887
375.6	INDUSTRIAL MEASURING AND REGULATING	87,670	87,670	0.98	931
375.7	OTHER DISTRIBUTION SYSTEMS				
	DISTRIBUTION SYSTEM STRUCTURES	5,411,288	5,502,475	3.33	
	OTHER BUILDINGS	2,164,341	2,279,391	3.24	
	<b>TOTAL ACCOUNT 375.70</b>	<b>7,575,608</b>	<b>7,781,867</b>	<b>3.31</b>	<b>277,127</b>
375.8	COMMUNICATION STRUCTURES	18,515	18,515	2.00	358
	<b>TOTAL ACCOUNT 375</b>	<b>12,786,399</b>	<b>13,188,304</b>	<b>2.82</b>	<b>400,103</b>
376	<b>MAINS</b>				
	CAST IRON	478,305	412,818	3.03	
	BARE STEEL	61,677,994	63,098,418	3.16	
	OTHER	1,190,847,068	1,382,382,827	1.99	
	<b>TOTAL ACCOUNT 376</b>	<b>1,253,001,366</b>	<b>1,445,894,061</b>	<b>2.05</b>	<b>29,824,488</b>
378	MEASURING AND REGULATING EQUIPMENT - GENERAL	44,038,417	47,244,839	3.24	1,601,128
379.1	MEASURING AND REGULATING EQUIPMENT - CITY GATE	141,117	141,117	3.17	4,846
380	<b>SERVICES</b>				
	BARE STEEL	828,932	700,879	1.74	
	OTHER	445,862,035	486,951,983	2.84	
	<b>TOTAL ACCOUNT 380</b>	<b>446,690,967</b>	<b>487,652,862</b>	<b>2.84</b>	<b>14,381,044</b>
381	<b>METERS</b>				
381.1	METERS - AMR	38,276,474	37,820,284	2.45	980,103
382	METER INSTALLATIONS	23,819,889	24,322,475	7.38	1,812,497
383	METER INSTALLATIONS	38,358,561	37,717,444	1.84	777,512
383	HOUSE REGULATORS	11,380,335	12,041,724	2.59	327,811
384	HOUSE REGULATOR INSTALLATIONS	3,884,772	3,884,772	1.73	72,432
385	INDUSTRIAL MEASURING AND REGULATING EQUIPMENT - OTHER THAN METERS	6,410,163	6,591,708	3.78	265,538
<b>OTHER EQUIPMENT</b>					
387	GENERAL	133,851	133,851	2.83	4,104
387.4	CUSTOMER INFORMATION SERVICES	4,334,343	4,334,343	4.94	231,980
387.5	GPS EQUIPMENT	2,805,486	4,699,056	11.78	448,277
	<b>TOTAL ACCOUNT 387</b>	<b>7,273,680</b>	<b>9,168,250</b>	<b>7.53</b>	<b>684,341</b>
	<b>TOTAL DISTRIBUTION PLANT</b>	<b>1,887,866,594</b>	<b>2,131,621,211</b>	<b>2.37</b>	<b>51,308,361</b>

COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 3. CALCULATION OF DEPRECIATION ACCRUALS FOR THE THIRTEEN MONTHS ENDED DECEMBER 31, 2017

DEPRECIABLE GROUP		ORIGINAL COST AS OF NOVEMBER 30, 2016	ORIGINAL COST AS OF DECEMBER 31, 2017	COMPOSITE ACCRUAL RATE	ANNUAL ACCRUAL AMOUNT
(1)		(2)	(3)	(4)	(5)*
<b>GENERAL PLANT</b>					
390 1	STRUCTURES AND IMPROVEMENTS - COMMUNICATIONS	120,070	120,070	2.10	2,732
OFFICE FURNITURE AND EQUIPMENT					
391.1	FURNITURE	3,779,933	1,755,178	4.10	155,944
391.11	EQUIPMENT	24,427	24,427	4.56	1,207
391.12	INFORMATION SYSTEMS	3,418,985	1,518,211	8.93	153,939
	TOTAL ACCOUNT 391	7,221,354	3,297,818	6.39	311,080
392	TRANSPORTATION EQUIPMENT - TRAILERS	97,533	92,324	13.50	14,235
393	STORES EQUIPMENT	16,678	13,435	-	0
TOOLS, SHOP AND GARAGE EQUIPMENT					
394	EQUIPMENT	14,131,845	14,598,446	3.70	587,848
394.12	CNG FACILITIES	1,953,498	1,953,498	0.01 **	212
	TOTAL ACCOUNT 394	16,085,342	16,549,944	3.28	588,158
395	LABORATORY EQUIPMENT	50,661	27,903	3.55	1,420
398	POWER OPERATED EQUIPMENT	1,435,493	1,435,493	1.49	23,171
COMMUNICATION EQUIPMENT					
397.1	TELEPHONE	188,831	0	- ***	5,208
397.6	TELEMETERING	1,891,311	3,234,569	11.10	308,873
	TOTAL ACCOUNT 397	2,180,141	3,234,569	10.23	315,078
398	MISCELLANEOUS EQUIPMENT	860,521	803,147	6.71	81,802
	TOTAL GENERAL PLANT	28,047,790	25,674,700	4.66	1,317,688
	SUBTOTAL DEPRECIABLE PLANT	1,921,716,172	2,163,153,984	2.41	82,931,785
<b>AMORTIZABLE PLANT</b>					
303	MISCELLANEOUS INTANGIBLE PLANT	25,832,412	38,337,250	****	3,309,641
305	STRUCTURES AND IMPROVEMENTS				
362	GAS HOLDERS				
362.1	ENVIRONMENTAL REMEDIATION				
374.2	LAND, OTHER DISTRIBUTION SYSTEMS	477,118	477,118		
375 71	STRUCTURES AND IMPROVEMENTS - LEASED	4,131,521	4,768,207	****	377,189
389.2	LAND AND LAND RIGHTS - LAND RIGHTS				
	SUBTOTAL AMORTIZABLE PLANT	30,441,051	41,582,575		3,686,830
<b>NONDEPRECIABLE PLANT</b>					
		172,413	172,413		
	TOTAL GAS PLANT	1,952,329,637	2,204,908,972		56,618,615

\* 13-month total based on monthly averages

\*\* Accrual manually calculated to achieve full recovery.

\*\*\* Accrual manually calculated due to retirement as of December 31, 2016.

\*\*\*\* Prorated accruals based on individual asset amortization

COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 4. AMORTIZATION OF EXPERIENCED AND ESTIMATED NET SALVAGE

ACCOUNT (1)	2012		2013		2014		2015		2016		NET SALVAGE (12)	SALVAGE ACCRUAL (13) + (12)
	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)		
351.20			608.48								(608.48)	(122)
362.10	0,457.05		40,496.89		461,689.98		58,875.48		1,303,742.00		(1,896,281.40)	(373,852)
374.20			57,833.75		(211,287.49)						153,633.74	30,727
374.40	260.16		4,911.96		21.81		2,838.76		2,893.00		(11,023.79)	(2,205)
375.34	17,416.11		22,427.70		20,674.45		25,529.72		23,141.00		(109,186.98)	(21,839)
375.60			1,091.39								(1,091.39)	(218)
375.70	5,103.09								54,287.00		(61,540.09)	(16,308)
376.00	886,996.12		891,743.41	2,051.59	1,281,289.43		1,442,869.23	20,828.00	2,189,077.00		(6,478,185.60)	(1,296,637)
378.00	18,887.95		216,795.76		185,399.17		122,225.11		78,087.00		(621,404.99)	(124,281)
378.10					91.84						(91.84)	(18)
380.00	2,192,533.99		1,750,828.78		4,680,972.30		2,822,703.18		2,086,950.00		(13,562,888.25)	(2,710,597)
381.00	305.85	25,333.32	23.20	6,554.08						32,670.35	6,534	
385.00	23,198.35		51,158.61		83,312.71		31,831.17		2,879.00	1,112.00	(172,170.84)	(34,434)
387.40	55.60		392.50		933.57		1,060.39				(2,442.06)	(488)
392.00										44,482.18	6,996	
398.00										104,869.48	20,934	
397.50									29,402.56		(29,402.56)	(5,881)
<b>TOTAL</b>	<b>3,181,214.27</b>	<b>25,333.32</b>	<b>2,838,110.41</b>	<b>187,787.33</b>	<b>6,493,117.87</b>	<b>0.00</b>	<b>4,567,663.60</b>	<b>20,828.00</b>	<b>5,789,867.00</b>	<b>1,112.00</b>	<b>(22,593,942.50)</b>	<b>(4,518,786)</b>

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## **PART II. DETAILED DEPRECIATION CALCULATIONS**

**CUMULATIVE DEPRECIATED ORIGINAL COST**

COLUMBIA GAS OF PENNSYLVANIA, INC.

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)		
1883	866	866				0.0
1884	2,319	2,319				0.0
1885	952	952				0.0
1886	9,401	9,401				0.0
1887	4,690	4,690				0.0
1888	6,580	6,580				0.0
1889	6,551	6,551				0.0
1890	1,700	1,700				0.0
1891	8,350	8,340		10	10	0.0
1892	1,355	1,352		3	13	0.0
1893	674	671		3	16	0.0
1894	1,617	1,608		9	25	0.0
1895	1,133	1,126		7	32	0.0
1896	4,261	4,225		36	68	0.0
1897	2,268	2,246		22	90	0.0
1898	1,634	1,617		17	107	0.0
1899	934	923		11	118	0.0
1900	8,185	8,076		109	227	0.0
1901	15,228	15,001		227	454	0.0
1902	7,354	7,232		122	576	0.0
1903	15,448	15,173		275	851	0.0
1904	8,443	8,280		163	1,014	0.0
1905	13,211	12,933		278	1,292	0.0
1906	5,827	5,695		132	1,424	0.0
1907	4,319	4,215		104	1,528	0.0
1908	5,085	4,953		132	1,660	0.0
1909	5,578	5,425		153	1,813	0.0
1910	945	917		28	1,841	0.0
1911	2,109	1,987		122	1,963	0.0
1912	1,654	1,595		59	2,022	0.0
1913	6,817	6,096		721	2,743	0.0
1914	6,680	6,423		257	3,000	0.0
1915	9,600	9,178		422	3,422	0.0
1916	2,187	2,100		87	3,509	0.0
1917	3,809	3,527		282	3,791	0.0
1918	1,643	1,594		49	3,840	0.0
1919	1,179	1,139		40	3,880	0.0
1920	2,241	2,009		232	4,112	0.0
1921	20,194	16,189		4,005	8,117	0.0
1922	7,397	7,018		379	8,496	0.0
1923	25,298	20,893		4,405	12,901	0.0
1924	49,951	39,408		10,543	23,444	0.0
1925	42,093	34,491		7,602	31,046	0.0
1926	42,530	34,164		8,366	39,412	0.0
1927	21,842	18,348		3,494	42,906	0.0

COLUMBIA GAS OF PENNSYLVANIA, INC.

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)		
1928	26,598	22,346	4,252		47,158	0.0
1929	56,881	46,872	10,009		57,167	0.0
1930	19,262	15,996	3,266		60,433	0.0
1931	14,342	11,911	2,431		62,864	0.0
1932	4,607	4,079	528		63,392	0.0
1933	10,263	8,839	1,424		64,816	0.0
1934	9,662	8,703	959		65,775	0.0
1935	2,932	2,686	246		66,021	0.0
1936	10,735	9,587	1,148		67,169	0.0
1937	15,375	14,366	1,009		68,178	0.0
1938	25,957	23,776	2,181		70,359	0.0
1939	171,640	135,088	36,552		106,911	0.0
1940	37,092	33,125	3,967		110,878	0.0
1941	41,610	36,866	4,744		115,622	0.0
1942	42,144	37,842	4,302		119,924	0.0
1943	30,047	25,837	4,210		124,134	0.0
1944	25,337	21,901	3,436		127,570	0.0
1945	23,210	19,527	3,683		131,253	0.0
1946	107,022	85,635	21,387		152,640	0.0
1947	108,167	88,949	19,218		171,858	0.0
1948	258,250	206,219	52,031		223,889	0.0
1949	632,466	491,663	140,803		364,692	0.0
1950	1,002,326	776,027	226,299		590,991	0.0
1951	859,868	672,138	187,730		778,721	0.0
1952	1,818,639	1,375,228	443,411		1,222,132	0.1
1953	1,297,714	991,928	305,786		1,527,918	0.1
1954	1,611,176	1,232,834	378,342		1,906,260	0.1
1955	3,779,549	2,811,955	967,594		2,873,854	0.2
1956	2,495,379	1,839,542	655,837		3,529,691	0.2
1957	3,303,529	2,455,123	848,406		4,378,097	0.2
1958	3,977,466	2,943,944	1,033,522		5,411,619	0.3
1959	3,395,140	2,487,972	907,168		6,318,787	0.4
1960	3,781,978	2,752,455	1,029,523		7,348,310	0.4
1961	3,984,368	2,907,659	1,076,709		8,425,019	0.5
1962	3,687,682	2,652,641	1,035,041		9,460,060	0.5
1963	4,514,152	3,236,272	1,277,880		10,737,940	0.6
1964	4,660,224	3,327,281	1,332,943		12,070,883	0.7
1965	3,920,720	2,793,282	1,127,438		13,198,321	0.8
1966	5,449,049	3,854,058	1,594,991		14,793,312	0.8
1967	5,270,333	3,712,229	1,558,104		16,351,416	0.9
1968	4,595,382	3,130,186	1,465,196		17,816,612	1.0
1969	4,165,738	2,734,078	1,431,660		19,248,272	1.1
1970	4,050,690	2,963,100	1,087,590		20,335,862	1.2
1971	5,958,881	3,961,900	1,996,981		22,332,843	1.3
1972	3,618,208	2,211,515	1,406,693		23,739,536	1.4



COLUMBIA GAS OF PENNSYLVANIA, INC.

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)	DEPRECIATED ORIGINAL COST		PCT OF COL 4 TOTAL (6)
			AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	
1973	4,135,237	2,071,880	2,063,357	25,802,893	1.5
1974	3,424,189	1,468,603	1,955,586	27,758,479	1.6
1975	3,590,753	1,545,936	2,044,817	29,803,296	1.7
1976	3,847,051	2,040,247	1,806,804	31,610,100	1.8
1977	7,996,182	4,278,750	3,717,432	35,327,532	2.0
1978	7,458,013	3,882,335	3,575,678	38,903,210	2.2
1979	9,178,652	4,741,667	4,436,985	43,340,195	2.5
1980	12,321,005	6,431,749	5,889,256	49,229,451	2.8
1981	14,521,408	7,425,099	7,096,309	56,325,760	3.2
1982	13,512,383	6,634,224	6,878,159	63,203,919	3.6
1983	11,059,865	5,382,111	5,677,754	68,881,673	3.9
1984	12,727,941	6,073,923	6,654,018	75,535,691	4.3
1985	12,814,626	6,108,239	6,706,387	82,242,078	4.7
1986	14,338,167	6,720,011	7,618,156	89,860,234	5.1
1987	14,845,571	6,949,220	7,896,351	97,756,585	5.6
1988	17,260,418	7,824,619	9,435,799	107,192,384	6.1
1989	16,471,168	7,445,148	9,026,020	116,218,404	6.6
1990	14,891,667	6,625,474	8,266,193	124,484,597	7.1
1991	14,623,293	6,490,189	8,133,104	132,617,701	7.5
1992	16,224,881	6,896,680	9,328,201	141,945,902	8.1
1993	17,607,748	7,452,223	10,155,525	152,101,427	8.7
1994	20,859,630	8,462,565	12,397,065	164,498,492	9.4
1995	21,024,034	8,639,090	12,384,944	176,883,436	10.1
1996	21,705,012	8,598,915	13,106,097	189,989,533	10.8
1997	23,958,511	8,855,010	15,103,501	205,093,034	11.7
1998	22,595,329	8,311,789	14,283,540	219,376,574	12.5
1999	21,732,020	7,451,083	14,280,937	233,657,511	13.3
2000	22,000,923	7,759,414	14,241,509	247,899,020	14.1
2001	22,407,800	7,076,699	15,331,101	263,230,121	15.0
2002	18,145,733	5,660,237	12,485,496	275,715,617	15.7
2003	22,492,643	6,637,308	15,855,335	291,570,952	16.6
2004	32,657,529	8,433,589	24,223,940	315,794,892	18.0
2005	36,923,767	8,420,739	28,503,028	344,297,920	19.6
2006	27,990,126	6,487,340	21,502,786	365,800,706	20.8
2007	56,780,347	11,111,743	45,668,604	411,469,310	23.4
2008	81,316,421	14,600,095	66,716,326	478,185,636	27.2
2009	56,388,894	9,546,334	46,842,560	525,028,196	29.9
2010	71,005,692	10,812,294	60,193,398	585,221,594	33.3
2011	127,240,206	19,740,856	107,499,350	692,720,944	39.4
2012	140,940,380	18,063,965	122,876,415	815,597,359	46.4
2013	167,078,971	16,124,423	150,954,548	966,551,907	55.0
2014	189,514,847	15,721,084	173,793,763	1,140,345,670	64.9
2015	169,225,110	10,492,070	158,733,040	1,299,078,710	73.9

COLUMBIA GAS OF PENNSYLVANIA, INC.

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 PCT OF AMOUNT COL 4 (5) TOTAL (6)	
			(2)	(3)	(4)	(5)
2016	213,032,360	7,699,839	205,332,521	1,504,411,231	85.6	
2017	256,930,860	3,610,262	253,320,598	1,757,731,829	100.0	
<b>SUBTOTAL</b>	<b>2,170,061,285</b>	<b>412,329,456</b>	<b>1,757,731,829</b>			
<b>AMORTIZABLE PLANT</b>	<b>41,332,498</b>	<b>8,759,843</b>	<b>32,572,655</b>			
<b>NONDEPRECIABLE PLANT</b>	<b>172,413</b>	<b>-</b>	<b>172,413</b>			
<b>TOTAL</b>	<b>2,211,566,196</b>	<b>421,089,299</b>	<b>1,790,476,897</b>			

**UTILITY PLANT IN SERVICE**

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 350.2 RIGHTS-OF-WAY

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)
INTERIM SURVIVOR CURVE.. SQUARE						
PROBABLE RETIREMENT YEAR.. 6-2025						
NET SALVAGE PERCENT.. 0						
1972	1,896.43	1,628	1,895	1	7.50	
1973	35.65	31	36			
	1,932.08	1,659	1,931	1		
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						0.0 0.00

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 351.2 COMPRESSOR STATION STRUCTURES

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)
INTERIM SURVIVOR CURVE.. IOWA 65-R2.5						
PROBABLE RETIREMENT YEAR.. 6-2025						
NET SALVAGE PERCENT.. 0						
1970	124,246.77	106,713	92,084	32,163	7.09	4,536
1971	44,955.88	38,501	33,223	11,733	7.11	1,650
1972	23,833.95	20,351	17,561	6,273	7.13	880
1973	1,046.90	891	769	278	7.15	39
1996	107,318.16	79,834	68,890	38,428	7.40	5,193
1997	932.86	687	593	340	7.35	46
1998	7,804.72	5,662	4,886	2,919	7.38	396
2001	87,639.68	60,445	52,159	35,481	7.42	4,782
2003	212,167.85	140,285	121,054	91,114	7.43	12,263
2004	195,419.81	126,104	108,817	86,603	7.42	11,672
2008	673,302.63	377,992	326,176	347,127	7.42	46,783
2009	4,140.12	2,210	1,907	2,233	7.42	301
2010	4,750.10	2,387	2,060	2,690	7.43	362
2012	59,116.96	25,137	21,691	37,426	7.44	5,030
2013	744,499.18	280,751	242,265	502,234	7.43	67,595
2014	847,776.27	271,458	234,247	613,529	7.43	82,575
2015	51,937.15	13,078	11,285	40,652	7.43	5,471
	3,190,888.99	1,552,486	1,339,667	1,851,222		249,574

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.4 7.82

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 352 WELLS - CONSTRUCTION

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)
INTERIM SURVIVOR CURVE.. SQUARE						
PROBABLE RETIREMENT YEAR.. 6-2025						
NET SALVAGE PERCENT.. 0						
1970	326,259.85	281,771	326,260			
1971	246,359.45	212,143	246,359			
1972	166,322.06	142,786	166,322			
1978	60,192.37	50,587	60,177	15	7.50	2
	799,133.73	687,287	799,118	16		2
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					8.0	0.00

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 352 WELLS - 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)
INTERIM SURVIVOR CURVE.. IOWA 45-S2.5						
PROBABLE RETIREMENT YEAR.. 6-2025						
NET SALVAGE PERCENT.. 0						
1970	62,707.48	54,599	62,707			
1971	61,403.78	53,308	61,404			
1972	42,286.87	36,600	42,287			
1978	2,281.54	1,974	2,282			
	168,679.67	146,481	168,680			
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						0.0 0.00

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 352.1 STORAGE LEASEHOLDS AND RIGHTS

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)
INTERIM SURVIVOR CURVE.. SQUARE						
PROBABLE RETIREMENT YEAR.. 6-2025						
NET SALVAGE PERCENT.. 0						
1970	206,940.78	178,722	206,932	9	7.50	1
	206,940.78	178,722	206,932	9		1
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						9.0 0.00



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 353 LINES

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)
INTERIM SURVIVOR CURVE.. IOWA 50-S1.5						
PROBABLE RETIREMENT YEAR.. 6-2025						
NET SALVAGE PERCENT.. 0						
1971	260,327.01	222,606	260,327			
1972	62,624.57	53,405	62,625			
1973	54,831.76	46,628	54,832			
1984	13,885.22	11,536	13,885			
1989	13,619.22	10,946	13,619			
	405,287.78	345,121	405,288			

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 0.0 .0.00

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 354 COMPRESSOR 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)
INTERIM SURVIVOR CURVE.. IOWA 50-R2.5						
PROBABLE RETIREMENT YEAR.. 6-2025						
NET SALVAGE PERCENT.. 0						
1950	5,136.46	4,652	5,136			
1952	23,053.77	20,790	23,054			
1957	354.01	316	351	3	5.30	1
1967	1,155.16	1,005	1,116	39	6.13	6
1969	2,134.22	1,844	2,048	86	6.29	14
1970	484,252.10	417,154	463,372	20,880	6.36	3,283
1971	20,956.72	17,994	19,988	969	6.43	151
1972	4,069.89	3,482	3,868	202	6.50	31
1979	1,842.10	1,567	1,741	101	6.75	15
1987	19,536.19	15,850	17,606	1,930	7.09	272
1991	11,076.55	8,717	9,683	1,394	7.17	194
1993	1,499.50	1,157	1,285	214	7.24	30
2013	280,193.37	105,913	117,647	162,546	7.40	21,966
2015	93.00	23	26	67	7.40	9
2016	49,964.63	8,434	9,368	40,597	7.39	5,494
2017	56,967.00	3,634	4,036	52,931	7.34	7,211
	962,284.67	612,532	680,325	281,960		38,677

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.3 4.02

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 355 MEASURING AND REGULATING 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)
INTERIM SURVIVOR CURVE.. IOWA 37-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2025						
NET SALVAGE PERCENT.. 0						
1970	74,761.84	63,859	74,762			
1975	2,685.09	2,249	2,685			
1981	13,738.52	11,785	13,739			
1986	29,489.73	24,524	29,490			
1987	2,334.83	1,923	2,334			
	123,010.01	104,340	123,010			
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						0.0 0.00

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 374.4 LAND AND LAND RIGHTS - LAND RIGHTS

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						
1957	2,436.67	1,860	1,713	724	15.38	47
1961	670.60	489	450	221	17.63	13
1962	265.62	191	176	90	18.23	5
1963	2,737.02	1,944	1,790	947	18.84	50
1964	3,123.17	2,188	2,015	1,108	19.46	57
1965	980.11	677	624	356	20.10	18
1966	2,054.34	1,399	1,289	765	20.75	37
1967	10,028.93	6,726	6,195	3,834	21.41	179
1968	1,764.45	1,165	1,073	691	22.08	31
1969	10,937.66	7,108	6,547	4,391	22.76	193
1970	7,719.52	4,935	4,545	3,175	23.45	135
1971	18,826.68	11,829	10,895	7,932	24.16	328
1972	10,686.92	6,598	6,077	4,610	24.87	185
1973	5,065.93	3,072	2,829	2,237	25.59	87
1974	15,521.38	9,234	8,505	7,016	26.33	266
1975	23,656.21	13,804	12,714	10,942	27.07	404
1976	22,919.42	14,267	13,140	9,779	25.17	389
1977	51,590.05	31,552	29,060	22,530	25.72	876
1978	20,150.56	12,098	11,143	9,008	26.29	343
1979	34,917.17	20,566	18,942	15,975	26.86	595
1980	22,053.11	12,736	11,730	10,323	27.44	376
1981	38,476.78	21,628	19,920	18,557	28.44	652
1982	60,769.04	33,435	30,795	29,974	29.02	1,033
1983	38,948.70	20,962	19,307	19,642	29.60	664
1984	43,485.35	22,873	21,067	22,418	30.19	743
1985	64,279.31	32,795	30,205	34,074	31.20	1,092
1986	39,283.54	19,551	18,007	21,277	31.79	669
1987	62,453.63	30,290	27,898	34,556	32.39	1,067
1988	96,814.41	45,406	41,820	54,994	33.40	1,647
1989	128,688.54	58,682	54,048	74,641	34.00	2,195
1990	82,616.65	36,583	33,694	48,923	34.61	1,414
1991	48,471.58	20,809	19,166	29,306	35.23	832
1992	13,272.38	5,483	5,050	8,222	36.23	227
1993	42,754.22	17,076	15,728	27,026	36.85	733
1994	34,876.02	13,441	12,380	22,496	37.48	600
1995	19,062.48	7,034	6,479	12,583	38.48	327
1996	45,571.28	16,169	14,892	30,679	39.10	785
1997	40,973.08	13,857	12,763	28,210	40.11	703
1998	9,110.01	2,949	2,716	6,394	40.74	157
1999	5,984.53	1,849	1,703	4,282	41.38	103
2000	14,126.81	4,128	3,802	10,325	42.38	244
2001	14,522.93	4,026	3,708	10,815	43.02	251

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 374.4 LAND AND LAND RIGHTS - LAND RIGHTS

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						
2002	3,010.97	789	727	2,284	43.67	52
2003	43,463.22	10,648	9,807	33,656	44.67	753
2004	76,714.71	17,606	16,216	60,499	45.32	1,335
2005	26,689.87	5,672	5,224	21,466	46.32	463
2006	37,244.09	7,322	6,744	30,500	46.98	649
2007	66,791.07	12,062	11,109	55,682	47.64	1,169
2008	28,061.16	4,585	4,223	23,838	48.64	490
2009	92,511.99	13,599	12,525	79,987	49.31	1,622
2010	111,976.87	14,535	13,387	98,590	50.30	1,960
2011	76,452.22	8,647	7,964	68,488	50.97	1,344
2012	218,086.25	20,980	19,323	198,763	51.65	3,848
2013	191,766.24	15,188	13,989	177,777	52.32	3,398
2014	89,784.76	5,567	5,127	84,658	52.99	1,598
2015	57,536.03	2,560	2,358	55,178	53.68	1,028
2016	249,912.20	6,698	6,169	243,743	54.37	4,483
2017	249,998.00	2,275	2,095	247,903	54.45	4,553
	2,832,646.44	742,197	683,587	2,149,059		49,497
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						43.4 1.75

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 374.5 LAND AND LAND RIGHTS - RIGHTS-OF-WAY

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 75-S4						
NET SALVAGE PERCENT.. 0						
1883	866.25	866	866			
1884	2,319.40	2,319	2,319			
1885	952.00	952	952			
1886	9,401.15	9,401	9,401			
1887	4,690.00	4,690	4,690			
1888	6,579.75	6,535	6,580			
1889	6,551.18	6,465	6,551			
1890	1,679.50	1,654	1,679			
1891	8,350.23	8,213	8,340	10	1.23	8
1892	1,354.95	1,331	1,352	3	1.35	2
1893	650.85	638	648	3	1.48	2
1894	1,616.78	1,584	1,608	9	1.53	6
1895	1,133.20	1,109	1,126	7	1.63	4
1896	4,260.56	4,161	4,225	36	1.76	20
1897	2,267.65	2,212	2,246	22	1.83	12
1898	1,633.73	1,592	1,617	17	1.93	9
1899	934.25	909	923	11	2.05	5
1900	8,185.42	7,953	8,076	109	2.13	51
1901	15,227.76	14,773	15,001	227	2.24	101
1902	7,330.74	7,100	7,209	122	2.36	52
1903	15,446.32	14,942	15,172	274	2.45	112
1904	8,443.31	8,154	8,280	163	2.57	63
1905	13,211.32	12,737	12,933	278	2.69	103
1906	5,826.89	5,609	5,695	132	2.80	47
1907	4,318.72	4,151	4,215	104	2.92	36
1908	5,084.82	4,878	4,953	132	3.05	43
1909	5,578.23	5,343	5,425	153	3.16	48
1910	944.58	903	917	28	3.29	9
1911	1,805.52	1,723	1,750	56	3.43	16
1912	1,590.08	1,515	1,538	52	3.55	15
1913	4,199.64	3,993	4,055	145	3.69	39
1914	6,522.34	6,188	6,283	239	3.84	62
1915	9,299.36	8,806	8,942	357	3.98	90
1916	2,133.53	2,016	2,047	87	4.13	21
1917	2,947.27	2,779	2,822	125	4.29	29
1918	969.85	912	926	44	4.44	10
1919	713.16	669	679	34	4.60	7
1920	1,116.43	1,045	1,061	55	4.78	12
1921	2,386.50	2,229	2,263	124	4.94	25
1922	5,478.84	5,105	5,184	295	5.12	58
1923	5,748.64	5,342	5,424	325	5.31	61
1924	2,962.36	2,746	2,788	174	5.49	32

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 374.5 LAND AND LAND RIGHTS - RIGHTS-OF-WAY

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 75-S4						
NET SALVAGE PERCENT.. 0						
1925	8,085.67	7,473	7,588	498	5.68	88
1926	3,690.49	3,401	3,453	237	5.89	40
1927	3,441.21	3,162	3,211	230	6.09	38
1928	3,616.30	3,312	3,363	253	6.31	40
1929	9,736.71	8,889	9,026	711	6.53	109
1930	3,705.73	3,372	3,424	282	6.76	42
1931	4,695.61	4,257	4,323	373	7.00	53
1932	2,031.20	1,835	1,863	168	7.25	23
1933	2,540.95	2,287	2,322	219	7.50	29
1934	4,020.82	3,604	3,660	361	7.77	46
1935	866.62	774	786	81	8.05	10
1936	4,994.63	4,440	4,508	487	8.33	58
1937	3,607.79	3,193	3,242	366	8.63	42
1938	1,245.49	1,097	1,114	131	8.94	15
1939	956.06	838	851	105	9.26	11
1940	13,850.45	12,079	12,265	1,585	9.59	165
1941	4,887.61	4,240	4,305	583	9.94	59
1942	8,169.68	7,048	7,157	1,013	10.30	98
1943	1,693.42	1,452	1,474	219	10.68	21
1944	3,627.62	3,092	3,140	488	11.07	44
1945	1,007.81	854	867	141	11.48	12
1946	623.85	525	533	91	11.90	8
1947	215.02	180	183	32	12.34	3
1948	3,109.38	2,579	2,619	490	12.80	38
1949	16,198.32	13,332	13,537	2,661	13.27	201
1950	20,944.17	17,102	17,365	3,579	13.76	260
1951	11,956.42	9,680	9,829	2,127	14.28	149
1952	8,038.39	6,451	6,550	1,488	14.81	100
1953	5,949.87	4,731	4,804	1,146	15.37	75
1954	21,585.01	16,998	17,260	4,325	15.94	271
1955	32,149.56	25,060	25,446	6,704	16.54	405
1956	51,558.51	39,762	40,375	11,184	17.16	652
1957	19,916.61	15,190	15,424	4,493	17.80	252
1958	63,499.25	47,870	48,608	14,891	18.46	807
1959	28,371.09	21,131	21,457	6,914	19.14	361
1960	26,305.63	19,343	19,641	6,665	19.85	336
1961	15,768.03	11,441	11,617	4,151	20.58	202
1962	18,087.78	12,946	13,145	4,943	21.32	232
1963	27,374.57	19,312	19,610	7,765	22.09	352
1964	40,027.79	27,817	28,246	11,782	22.88	515
1965	17,574.04	12,023	12,208	5,366	23.69	227
1966	18,597.25	12,517	12,710	5,887	24.52	240

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 374.5 LAND AND LAND RIGHTS - RIGHTS-OF-WAY

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 75-S4						
NET SALVAGE PERCENT.. 0						
1967	96,910.77	64,129	65,117	31,794	25.37	1,253
1968	82,637.79	53,737	54,565	28,073	26.23	1,070
1969	46,057.56	29,409	29,862	16,196	27.11	597
1970	45,097.36	28,255	28,690	16,407	28.01	586
1971	54,600.87	33,547	34,064	20,537	28.92	710
1972	80,822.88	48,666	49,416	31,407	29.84	1,053
1973	31,060.02	18,313	18,595	12,465	30.78	405
1974	42,716.26	24,650	25,030	17,686	31.72	558
1975	53,203.52	30,028	30,491	22,713	32.67	695
1976	46,796.87	26,609	27,019	19,778	31.49	628
1977	50,016.13	27,749	28,176	21,840	32.50	672
1978	27,600.77	14,938	15,168	12,433	33.49	371
1979	28,379.92	15,078	15,310	13,070	33.96	385
1980	24,054.08	12,448	12,640	11,414	34.96	326
1981	55,235.53	27,822	28,251	26,985	35.96	750
1982	47,534.94	23,287	23,646	23,889	36.96	646
1983	27,148.25	12,925	13,124	14,024	37.96	369
1984	30,306.87	14,011	14,227	16,080	38.96	413
1985	72,105.59	32,339	32,837	39,269	39.96	983
1986	17,533.91	7,622	7,739	9,795	40.96	239
1987	27,416.83	11,540	11,718	15,699	41.96	374
1988	11,339.22	4,616	4,687	6,652	42.96	155
1989	70,082.23	27,563	27,988	42,094	43.96	958
1990	44,760.66	16,987	17,249	27,512	44.96	612
1991	35,224.46	12,882	13,080	22,144	45.96	482
1992	54,141.31	19,052	19,346	34,795	46.96	741
1993	58,993.43	19,946	20,253	38,740	47.96	808
1994	184,531.84	59,844	60,766	123,766	48.96	2,528
1995	584,928.49	181,620	184,418	400,510	49.96	8,017
1996	126,940.88	37,663	38,243	88,698	50.96	1,741
1997	68,030.65	19,246	19,543	48,488	51.96	933
1998	40,132.45	10,800	10,966	29,166	52.96	551
2000	15,568.19	3,760	3,818	11,750	54.96	214
2001	39,714.12	9,043	9,182	30,532	55.96	546
2002	181,571.19	38,838	39,437	142,134	56.96	2,495
2003	1,938.28	388	394	1,544	57.96	27
2006	3,432.18	545	553	2,879	60.96	47
	3,239,601.77	1,622,826	1,647,478	1,592,124		41,877

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 38.0 1.29



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

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-R1.5						
NET SALVAGE PERCENT.. 0						
1922	174.42	154	155	19	7.03	3
1925	148.99	130	131	18	7.82	2
1927	164.84	142	143	22	8.38	3
1928	417.06	357	360	57	8.66	7
1929	3,408.19	2,900	2,921	487	8.94	54
1930	3,481.36	2,946	2,967	514	9.23	56
1931	950.12	799	805	145	9.52	15
1932	1,957.09	1,637	1,649	308	9.82	31
1933	4,524.92	3,762	3,789	736	10.12	73
1934	1,761.14	1,455	1,466	295	10.42	28
1935	78.51	64	64	15	10.73	1
1936	2,054.96	1,677	1,689	366	11.04	33
1938	514.26	414	417	97	11.67	8
1939	6,907.69	5,526	5,566	1,342	12.00	112
1940	468.38	372	375	93	12.33	8
1941	764.02	603	607	157	12.67	12
1942	1,102.01	863	869	233	13.01	18
1943	647.19	503	507	140	13.36	10
1945	558.36	427	430	128	14.08	9
1946	899.34	683	688	211	14.45	15
1947	2,445.09	1,841	1,854	591	14.83	40
1948	5,956.62	4,447	4,479	1,478	15.21	97
1949	1,031.07	763	769	262	15.61	17
1950	4,515.52	3,311	3,335	1,181	16.01	74
1951	11,097.45	8,060	8,118	2,979	16.42	181
1952	33,335.92	23,980	24,154	9,182	16.84	545
1953	26,605.74	18,952	19,089	7,517	17.26	436
1954	20,552.80	14,490	14,595	5,958	17.70	337
1955	14,631.61	10,208	10,282	4,350	18.14	240
1956	40,269.62	27,793	27,995	12,275	18.59	660
1957	78,878.71	53,835	54,226	24,653	19.05	1,294
1958	62,080.71	41,884	42,188	19,893	19.52	1,019
1959	39,928.57	26,619	26,812	13,117	20.00	656
1960	109,064.39	71,819	72,340	36,724	20.49	1,792
1961	54,544.98	35,464	35,721	18,824	20.99	897
1962	92,595.05	59,430	59,861	32,734	21.49	1,523
1963	35,347.93	22,387	22,549	12,799	22.00	582
1964	46,203.54	28,862	29,071	17,133	22.52	761
1965	29,623.45	18,238	18,370	11,253	23.06	488
1966	25,773.92	15,640	15,753	10,021	23.59	425
1967	25,069.08	14,983	15,092	9,977	24.14	413
1968	9,671.13	5,690	5,731	3,940	24.70	160

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

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-R1.5						
NET SALVAGE PERCENT.. 0						
1969	17,436.87	10,096	10,169	7,268	25.26	288
1970	5,666.66	3,227	3,250	2,417	25.83	94
1971	35,838.19	20,063	20,209	15,629	26.41	592
1972	11,449.61	6,297	6,343	5,107	27.00	189
1973	14,463.74	7,810	7,867	6,597	27.60	239
1974	12,150.00	6,440	6,487	5,663	28.20	201
1975	16,285.02	8,465	8,526	7,759	28.81	269
1976	25,445.26	15,840	15,955	9,490	25.17	377
1977	21,856.50	13,367	13,464	8,392	25.72	326
1978	34,609.26	20,779	20,930	13,679	26.29	520
1979	36,531.55	21,517	21,673	14,859	26.86	553
1980	27,283.93	15,756	15,870	11,414	27.44	416
1981	26,971.78	15,358	15,469	11,503	27.60	417
1982	40,785.93	22,734	22,899	17,887	28.19	635
1983	32,332.74	17,625	17,753	14,580	28.79	506
1984	18,387.62	9,793	9,864	8,524	29.40	290
1985	12,509.47	6,545	6,592	5,917	29.61	200
1986	25,833.99	13,183	13,279	12,555	30.23	415
1987	11,041.74	5,490	5,530	5,512	30.85	179
1988	53,061.48	25,830	26,017	27,044	31.10	870
1989	30,245.95	14,309	14,413	15,833	31.74	499
1990	18,236.70	8,425	8,486	9,751	32.02	305
1991	35,164.23	15,747	15,861	19,303	32.67	591
1992	127.66	56	56	72	32.98	2
1993	23,134.48	9,749	9,820	13,314	33.64	396
1994	1,489.42	609	613	876	33.97	26
1995	13,405.90	5,279	5,317	8,089	34.64	234
1996	50,188.65	19,102	19,241	30,948	34.99	884
1997	20,310.84	7,454	7,508	12,803	35.36	362
1998	63,176.50	22,301	22,463	40,714	35.75	1,139
1999	4,489.60	1,520	1,531	2,959	36.14	82
2000	29,231.30	9,465	9,534	19,697	36.55	539
2001	30,339.46	9,363	9,431	20,908	36.97	566
2002	34,629.69	10,146	10,220	24,410	37.41	652
2003	65,315.73	18,092	18,223	47,093	37.85	1,244
2004	41,334.30	10,825	10,904	30,430	38.05	800
2005	65,519.40	16,052	16,168	49,351	38.52	1,281
2006	198,470.11	45,410	45,740	152,730	38.75	3,941
2007	169,360.18	35,921	36,182	133,178	39.00	3,415
2008	464,796.76	90,542	91,199	373,598	39.28	9,511
2009	44,231.55	7,856	7,913	36,319	39.35	923
2010	179,288.03	28,650	28,858	150,430	39.45	3,813

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

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-R1.5						
NET SALVAGE PERCENT.. 0						
2011	216,212.74	30,486	30,707	185,506	39.59	4,686
2012	587,577.61	72,037	72,559	515,019	39.35	13,088
2013	309,462.78	31,875	32,106	277,357	39.17	7,081
2014	353,266.95	29,321	29,534	323,733	38.69	8,367
2015	374,402.91	23,138	23,306	351,097	37.98	9,244
2016	398,900.96	15,717	15,831	383,070	36.52	10,489
2017	427,870.00	6,461	6,508	421,362	32.61	12,921

5,530,327.48      1,396,233      1,406,360      4,123,967      117,792

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 35.0      2.13

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.6 STRUCTURES AND IMPROVEMENTS - INDUSTRIAL MEASURING AND  
REGULATING

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-R1.5						
NET SALVAGE PERCENT.. 0						
1922	114.31	111	114			
1928	87.15	81	87			
1930	127.57	117	128			
1931	263.40	241	263			
1934	783.68	707	784			
1935	147.25	132	147			
1936	21.46	19	21			
1937	618.76	549	619			
1938	1,463.03	1,291	1,463			
1940	440.04	384	440			
1942	1,018.37	877	1,018			
1944	2,850.41	2,422	2,841	9	7.52	1
1946	377.07	316	371	6	8.11	1
1947	568.77	473	555	14	8.41	2
1948	482.71	399	468	15	8.71	2
1950	1,857.60	1,511	1,773	85	9.33	9
1951	3,131.90	2,527	2,965	167	9.65	17
1952	3,969.07	3,178	3,728	241	9.97	24
1953	4,259.74	3,382	3,968	292	10.30	28
1955	4,904.63	3,827	4,490	415	10.99	38
1956	2,507.83	1,939	2,275	233	11.34	21
1957	14,375.38	11,012	12,919	1,456	11.70	124
1958	1,667.93	1,265	1,484	184	12.07	15
1959	5,902.55	4,433	5,201	702	12.45	56
1960	1,345.00	1,000	1,173	172	12.84	13
1961	1,954.81	1,437	1,686	269	13.24	20
1963	3,416.99	2,455	2,880	537	14.07	38
1964	1,441.97	1,024	1,201	241	14.49	17
1967	1,614.49	1,103	1,294	320	15.84	20
1970	2,450.11	1,603	1,881	569	17.28	33
1971	7,721.50	4,976	5,838	1,884	17.78	106
1972	1.00	1	1			
1980	3,885.67	2,550	2,992	894	19.65	45
1988	11,897.69	6,598	7,740	4,158	23.69	176
	87,669.84	63,940	74,808	12,862		806

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.0 0.92

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM  
STRUCTURES

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)
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GETTYSBURG GARAGE  
INTERIM SURVIVOR CURVE.. IOWA 90-R1  
PROBABLE RETIREMENT YEAR.. 6-2007  
NET SALVAGE PERCENT.. 0

1934	778.19	778	778			
1955	80.00	80	80			
1957	860.20	860	860			
1971	1,426.78	1,427	1,427			
	3,145.17	3,145	3,145			

WARREN SERVICE CENTER  
INTERIM SURVIVOR CURVE.. IOWA 90-R1  
PROBABLE RETIREMENT YEAR.. 6-2033  
NET SALVAGE PERCENT.. 0

1958	18,578.51	14,358	15,905	2,673	14.47	185
1959	433.43	334	370	63	14.49	4
1978	1,675.90	1,225	1,357	319	14.55	22
1985	19,261.55	13,271	14,701	4,560	14.67	311
1987	7,412.28	4,996	5,534	1,878	14.75	127
1995	7,987.28	4,816	5,335	2,652	14.81	179
1998	14,349.25	8,170	9,050	5,299	14.75	359
1999	5,121.39	2,842	3,148	1,973	14.83	133
2003	16,873.40	8,342	9,241	7,632	14.83	515
2007	4,507.15	1,874	2,076	2,431	14.75	165
2010	1,378.04	465	515	863	14.72	59
2012	15,826.31	4,317	4,782	11,044	14.66	753
2014	1,810.04	352	390	1,420	14.52	98
2015	239,119.80	35,342	39,151	199,969	14.42	13,867
2016	142,175.00	13,563	15,025	127,150	14.22	8,942
	496,509.33	114,267	126,581	369,928		25,719

WASHINGTON SERVICE CENTER  
INTERIM SURVIVOR CURVE.. IOWA 90-R1  
PROBABLE RETIREMENT YEAR.. 6-2030  
NET SALVAGE PERCENT.. 0

1955	7,697.97	6,272	6,948	750	11.80	64
1957	15,810.71	12,813	14,194	1,617	11.83	137
1958	970.12	784	868	102	11.84	9

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM  
STRUCTURES

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)
WASHINGTON SERVICE CENTER						
INTERIM SURVIVOR CURVE.. IOWA 90-R1						
PROBABLE RETIREMENT YEAR.. 6-2030						
NET SALVAGE PERCENT.. 0						
1962	251.75	201	223	29	11.89	2
1963	15,731.04	12,521	13,870	1,861	11.90	156
1964	74,735.67	59,270	65,657	9,079	11.92	762
1965	2,068.02	1,634	1,810	258	11.93	22
1968	433.80	339	376	58	11.96	5
1969	810.82	631	699	112	11.97	9
1973	1,110.79	849	940	170	12.01	14
1976	1,916.59	1,487	1,647	269	11.98	22
1978	1,642.04	1,258	1,394	248	12.05	21
1982	1,077.99	807	894	184	11.90	15
1984	4,631.57	3,413	3,781	851	11.95	71
1985	887.69	649	719	169	11.95	14
1987	176,252.14	126,338	139,953	36,300	12.05	3,012
1995	191,700.92	124,644	138,076	53,625	12.10	4,432
1996	41,126.48	26,350	29,190	11,937	12.06	990
1997	50,473.01	31,768	35,191	15,282	12.07	1,266
1998	27,492.05	16,996	18,828	8,665	12.04	720
2005	151,190.19	76,926	85,216	65,974	12.07	5,466
2006	8,764.29	4,284	4,746	4,019	12.03	334
2008	7,736.87	3,410	3,777	3,959	12.05	329
2010	85,443.94	32,810	36,346	49,098	12.03	4,081
2011	15,630.26	5,486	6,077	9,553	12.02	795
2013	101,862.52	27,870	30,873	70,989	11.95	5,941
2015	37,612.98	6,552	7,258	30,355	11.85	2,562
2016	236,962.00	26,871	29,767	207,195	11.73	17,664
	1,262,024.22	613,233	679,317	582,707		48,915

BRADFORD OFFICE  
INTERIM SURVIVOR CURVE.. IOWA 90-R1  
PROBABLE RETIREMENT YEAR.. 6-2008  
NET SALVAGE PERCENT.. 0

1958	20,999.60	21,000	21,000			
1959	135.56	136	136			
1960	720.61	721	721			
1964	300.54	301	301			

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM  
STRUCTURES

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)
<b>BRADFORD OFFICE</b>						
INTERIM SURVIVOR CURVE.. IOWA 90-R1						
PROBABLE RETIREMENT YEAR.. 6-2008						
NET SALVAGE PERCENT.. 0						
1965	4,024.39	4,024	4,024			
1993	27,303.35	27,303	27,303			
1999	1,735.00	1,735	1,735			
	55,219.05	55,220	55,219			
<b>HANOVER SERVICE CENTER</b>						
INTERIM SURVIVOR CURVE.. IOWA 90-R1						
PROBABLE RETIREMENT YEAR.. 6-2029						
NET SALVAGE PERCENT.. 0						
1939	1,021.84	871	968	54	10.67	5
1949	304.83	255	283	21	10.83	2
1979	82,555.74	64,204	71,369	11,186	11.00	1,017
1983	5,330.93	4,028	4,478	853	11.16	76
1991	1,591.78	1,122	1,247	345	11.09	31
1992	3,025.81	2,107	2,342	684	11.13	61
1998	244,933.64	155,704	173,081	71,852	11.17	6,433
2000	1,939.89	1,185	1,317	623	11.15	56
2007	8,523.13	4,135	4,596	3,927	11.15	352
2009	8,797.71	3,814	4,240	4,558	11.11	410
2013	76,003.02	21,995	24,450	51,553	11.05	4,665
2014	3,994.10	963	1,070	2,924	11.01	266
2015	12,713.40	2,362	2,626	10,088	10.96	920
2016	102,916.97	12,494	13,888	89,029	10.86	8,198
2017	18,384.00	835	928	17,456	10.52	1,659
	572,036.79	276,074	306,885	265,152		24,151
<b>JEANNETTE SERVICE CENTER AND SHOP</b>						
INTERIM SURVIVOR CURVE.. IOWA 90-R1						
PROBABLE RETIREMENT YEAR.. 6-2056						
NET SALVAGE PERCENT.. 0						
1981	590,688.81	314,778	349,908	240,781	31.99	7,527
1986	14,429.18	7,090	7,881	6,548	32.60	201
1987	10,616.13	5,149	5,724	4,892	32.39	151
1988	10,107.79	4,801	5,337	4,771	32.61	146

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM  
STRUCTURES

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)
JEANNETTE SERVICE CENTER AND SHOP INTERIM SURVIVOR CURVE.. IOWA 90-R1 PROBABLE RETIREMENT YEAR.. 6-2056 NET SALVAGE PERCENT.. 0						
1996	15,775.33	6,241	6,938	8,838	32.85	269
1997	7,863.75	3,031	3,369	4,494	32.69	137
1998	1,287.18	482	536	751	32.58	23
2000	2,031.37	707	786	1,245	32.75	38
2003	23,799.35	7,316	8,132	15,667	32.67	480
2006	121,531.23	31,865	35,421	86,110	32.36	2,661
2007	83,067.78	20,318	22,586	60,482	32.42	1,866
2009	23,075.24	4,825	5,363	17,712	32.15	551
2010	4,245.27	806	896	3,349	32.02	105
2013	776,087.75	97,787	108,700	667,387	31.21	21,384
2015	1,068,952.40	81,775	90,901	978,051	30.18	32,407
2016	318,221.91	15,561	17,298	300,924	29.17	10,316
2017	73,548.00	1,353	1,504	72,044	26.60	2,708
	3,145,328.47	603,885	671,280	2,474,048		80,970

OTHER BUILDINGS  
SURVIVOR CURVE.. IOWA 33-S1  
NET SALVAGE PERCENT.. 0

1951	1.18	1	1			
1953	1,158.07	1,144	1,158			
1954	1,184.69	1,161	1,185			
1955	4,101.65	3,986	4,102			
1956	184.96	178	185			
1961	4,463.99	4,112	4,464			
1966	1,747.90	1,532	1,705	43	4.07	11
1969	1,074.37	912	1,015	60	5.00	12
1971	92,517.50	76,705	85,343	7,174	5.64	1,272
1972	8,161.24	6,685	7,438	723	5.97	121
1975	5,172.85	4,077	4,536	637	6.99	91
1976	6,027.94	5,178	5,761	267	6.81	39
1984	40,025.19	31,376	34,909	5,116	9.24	554
1985	3,042.91	2,344	2,608	435	9.70	45
1987	13,522.94	10,104	11,242	2,281	10.32	221
1988	14,045.26	10,318	11,480	2,565	10.66	241
1989	10,861.35	7,831	8,713	2,148	11.03	195
1990	30,626.22	21,647	24,085	6,541	11.41	573
1993	7,771.26	5,160	5,741	2,030	12.40	164



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM  
STRUCTURES

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)
OTHER BUILDINGS						
SURVIVOR CURVE.. IOWA 33-S1						
NET SALVAGE PERCENT.. 0						
1994	14,549.22	9,402	10,461	4,088	12.87	318
1995	26,830.99	16,904	18,808	8,023	13.21	607
1996	2,310.13	1,416	1,575	735	13.59	54
1997	1,294.99	770	857	438	13.98	31
1998	55,210.51	31,757	35,333	19,877	14.40	1,380
1999	23,028.27	12,781	14,220	8,808	14.83	594
2000	182,534.64	97,747	108,755	73,780	15.18	4,860
2001	8,848.42	4,541	5,052	3,796	15.65	243
2003	12,306.75	5,746	6,393	5,914	16.56	357
2006	1,732.08	675	751	981	18.00	54
2007	26,052.35	9,410	10,470	15,583	18.57	839
2008	131,299.91	43,657	48,573	82,726	19.07	4,338
2009	237,389.42	71,644	79,712	157,677	19.67	8,016
2010	11,676.17	3,153	3,508	8,168	20.28	403
2011	17,596.64	4,174	4,644	12,953	20.90	620
2012	15,521.85	3,159	3,515	12,007	21.53	558
2013	571,768.37	96,229	107,066	464,703	22.24	20,895
2014	319,692.25	42,295	47,058	272,634	22.96	11,874
2015	57,426.71	5,484	6,102	51,325	23.68	2,167
2016	232,645.34	13,400	14,909	217,736	24.54	8,873
2017	91,932.00	1,774	1,974	89,958	25.41	3,540
	2,287,338.48	670,569	745,406	1,541,932		74,160
	7,821,601.51	2,336,393	2,587,833	5,233,767		253,915
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						20.6 3.25

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.8 STRUCTURES AND IMPROVEMENTS - COMMUNICATION STRUCTURES

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						
NET SALVAGE PERCENT.. 0						
2001	16,515.17	5,912	6,866	9,649	29.59	326
	16,515.17	5,912	6,866	9,649		326
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						29.6 1.97

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.1 MAINS - CAST IRON

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)
INTERIM SURVIVOR CURVE.. IOWA 72-R1.5						
PROBABLE RETIREMENT YEAR.. 12-2025						
NET SALVAGE PERCENT.. 0						
1911	303.29	278	237	66	6.06	11
1912	30.89	28	24	7	6.11	1
1913	2,617.69	2,391	2,041	577	6.16	94
1914	80.93	74	63	18	6.21	3
1915	289.54	264	225	65	6.25	10
1917	700.10	637	544	156	6.34	25
1918	25.51	23	20	6	6.38	1
1919	26.15	24	20	6	6.42	1
1920	786.70	715	610	177	6.46	27
1921	17,237.20	15,645	13,356	3,881	6.50	597
1922	284.89	258	220	65	6.54	10
1923	18,031.13	16,341	13,951	4,080	6.57	621
1924	45,675.10	41,356	35,307	10,368	6.61	1,569
1925	31,118.30	28,150	24,032	7,086	6.65	1,066
1926	35,606.73	32,186	27,478	8,129	6.68	1,217
1927	14,164.76	12,794	10,923	3,242	6.71	483
1928	17,147.17	15,473	13,210	3,937	6.75	583
1929	38,197.79	34,440	29,402	8,796	6.78	1,297
1930	10,651.56	9,595	8,191	2,461	6.81	361
1931	8,213.00	7,391	6,310	1,903	6.85	278
1932	49.37	44	38	11	6.88	2
1933	1,535.80	1,380	1,178	358	6.91	52
1934	781.37	701	598	183	6.94	26
1937	112.68	101	86	27	7.03	4
1938	2,896.66	2,589	2,210	687	7.05	97
1939	140,176.70	125,148	106,842	33,335	7.08	4,708
1940	2,973.64	2,652	2,264	710	7.11	100
1941	6,596.88	5,876	5,016	1,581	7.14	221
1942	673.93	600	512	162	7.16	23
1943	1,716.55	1,525	1,302	415	7.19	58
1944	2,224.18	1,974	1,685	539	7.21	75
1945	1,630.24	1,445	1,234	396	7.24	55
1946	1,242.54	1,100	939	304	7.26	42
1947	558.21	494	422	136	7.28	19
1948	8,072.70	7,127	6,085	1,988	7.31	272

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.1 MAINS - CAST IRON

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)
INTERIM SURVIVOR CURVE.. IOWA 72-R1.5						
PROBABLE RETIREMENT YEAR.. 12-2025						
NET SALVAGE PERCENT.. 0						
1949	36.57	32	27	10	7.33	1
1951	20.78	18	15	6	7.37	1
1982	328.98	270	231	98	7.79	13
	412,816.21	371,139	316,848	95,968		14,024
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.8						3.40

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.3 MAINS - BARE STEEL

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)
INTERIM SURVIVOR CURVE.. IOWA 72-R1.5						
PROBABLE RETIREMENT YEAR.. 12-2025						
NET SALVAGE PERCENT.. 0						
1943	10,306.90	9,159	7,819	2,488	7.19	346
1944	5,672.74	5,035	4,298	1,375	7.21	191
1945	7,962.87	7,058	6,026	1,937	7.24	268
1946	73,976.78	65,489	55,909	18,068	7.26	2,489
1947	56,003.08	49,515	42,272	13,731	7.28	1,886
1948	166,079.24	146,618	125,170	40,909	7.31	5,596
1949	516,027.32	454,930	388,382	127,645	7.33	17,414
1950	825,127.97	726,385	620,128	205,000	7.35	27,891
1951	639,018.18	561,710	479,542	159,476	7.37	21,639
1952	1,430,205.55	1,255,249	1,071,629	358,577	7.39	48,522
1953	1,027,215.93	900,119	768,448	258,768	7.41	34,921
1954	1,269,742.19	1,110,809	948,318	321,424	7.43	43,260
1955	3,131,519.05	2,734,818	2,334,764	796,755	7.45	106,947
1956	1,864,874.30	1,626,040	1,388,180	476,694	7.46	63,900
1957	2,472,803.19	2,152,130	1,837,312	635,491	7.48	84,959
1958	2,984,453.94	2,592,446	2,213,218	771,236	7.50	102,831
1959	2,407,317.70	2,087,385	1,782,038	625,280	7.51	83,260
1960	2,580,948.89	2,233,295	1,906,604	674,345	7.53	89,554
1961	2,890,404.65	2,495,633	2,130,567	759,838	7.55	100,641
1962	2,464,433.97	2,123,578	1,812,937	651,497	7.56	86,177
1963	3,253,238.35	2,796,744	2,387,631	865,607	7.58	114,196
1964	3,178,529.57	2,726,511	2,327,672	850,858	7.59	112,103
1965	2,559,333.31	2,190,303	1,869,901	689,432	7.60	90,715
1966	3,729,275.07	3,183,197	2,717,553	1,011,722	7.62	132,772
1967	3,544,920.34	3,018,287	2,576,767	968,153	7.63	126,888
1968	2,654,810.59	2,254,518	1,924,723	730,088	7.64	95,561
1969	2,128,444.38	1,802,601	1,538,913	589,531	7.65	77,063
1970	967,798.23	817,306	697,749	270,049	7.66	35,254
1971	2,345,800.74	1,975,141	1,686,214	659,587	7.67	85,996
1972	858,777.15	720,858	615,409	243,368	7.68	31,689
1973	570,490.11	477,306	407,485	163,005	7.69	21,197
1974	1,279.42	1,067	911	368	7.70	48
1975	847.16	704	601	246	7.71	32
1976	237.35	200	171	66	7.76	9
1977	2,018.32	1,692	1,444	574	7.81	73
1978	162,339.35	135,943	116,057	46,282	7.67	6,034
1979	17,015.91	14,150	12,080	4,936	7.80	633
1980	197,422.77	163,624	139,689	57,734	7.75	7,450
1981	56.28	46	39	17	7.75	2
1982	242.33	199	170	72	7.79	9
1983	7,356.13	6,014	5,134	2,222	7.70	289

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.3 MAINS - BARE STEEL

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)
INTERIM SURVIVOR CURVE.. IOWA 72-R1.5						
PROBABLE RETIREMENT YEAR.. 12-2025						
NET SALVAGE PERCENT.. 0						
1984	317.96	258	220	98	7.82	13
1985	34.38	28	24	10	7.82	1
1986	79.96	64	55	25	7.72	3
1988	0.10					
1989	875.95	689	588	288	7.73	37
1990	11,471.33	8,927	7,621	3,850	7.84	491
1992	44,376.49	33,948	28,982	15,394	7.83	1,966
1997	3,963.85	2,868	2,449	1,515	7.83	193
1998	655.62	468	400	256	7.82	33
2008	77.43	42	36	41	7.83	5
2011	32,237.74	14,626	12,486	19,752	7.83	2,523
	53,098,418.11	45,685,730	39,002,735	14,095,683		1,865,970
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						7.6 3.51

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.45 MAINS - OTHER

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 72-R1.5						
NET SALVAGE PERCENT.. 0						
1952	81,500.30	51,674	44,115	37,385	26.35	1,419
1954	22,818.08	14,134	12,066	10,752	27.40	392
1955	85,497.04	52,331	44,676	40,821	27.93	1,462
1956	81,256.43	49,115	41,930	39,326	28.48	1,381
1957	87,020.39	51,946	44,347	42,673	29.02	1,470
1958	71,309.63	42,013	35,867	35,443	29.58	1,198
1959	81,954.50	47,648	40,678	41,276	30.14	1,369
1960	57,990.87	33,256	28,391	29,600	30.71	964
1961	28,275.12	15,987	13,648	14,627	31.29	467
1962	75,664.36	42,172	36,003	39,661	31.87	1,244
1963	80,493.18	44,204	37,738	42,755	32.46	1,317
1964	155,336.58	84,011	71,722	83,615	33.06	2,529
1965	81,436.85	43,365	37,021	44,416	33.66	1,320
1966	101,894.02	53,396	45,585	56,309	34.27	1,643
1967	76,504.00	39,442	33,672	42,832	34.88	1,228
1968	291,245.71	147,644	126,046	165,200	35.50	4,654
1969	634,061.00	315,883	269,675	364,386	36.13	10,085
1970	660,418.73	323,235	275,952	384,467	36.76	10,459
1971	1,330,004.15	639,147	545,651	784,353	37.40	20,972
1972	1,101,427.33	519,356	443,384	658,043	38.05	17,294
1973	2,496,879.42	1,154,807	985,880	1,510,999	38.70	39,044
1974	2,857,321.97	1,295,310	1,105,830	1,751,492	39.36	44,499
1975	2,819,475.10	1,252,326	1,069,133	1,750,342	40.02	43,737
1976	2,764,124.69	1,514,188	1,292,690	1,471,435	34.26	42,949
1977	5,155,219.13	2,776,601	2,370,435	2,784,784	34.69	80,276
1978	5,110,954.95	2,685,296	2,292,486	2,818,469	35.68	78,993
1979	6,154,601.05	3,175,159	2,710,691	3,443,910	36.13	95,320
1980	7,613,113.45	3,853,758	3,290,023	4,323,090	36.58	118,182
1981	8,886,095.01	4,411,058	3,765,800	5,120,295	37.03	138,274
1982	8,972,612.94	4,364,279	3,725,864	5,246,749	37.49	139,951
1983	7,127,286.05	3,393,301	2,896,923	4,230,363	37.96	111,443
1984	8,209,354.66	3,822,276	3,263,146	4,946,209	38.45	128,640
1985	7,675,829.38	3,492,502	2,981,612	4,694,217	38.93	120,581
1986	8,565,226.17	3,804,673	3,248,118	5,317,108	39.42	134,884
1987	8,252,935.49	3,574,346	3,051,484	5,201,451	39.92	130,297
1988	9,554,095.03	4,029,917	3,440,413	6,113,682	40.43	151,216
1989	8,559,295.96	3,512,735	2,998,886	5,560,410	40.94	135,819
1990	7,259,691.94	2,914,766	2,488,389	4,771,303	40.99	116,402
1991	7,172,222.62	2,794,298	2,385,543	4,786,680	41.52	115,286
1992	8,038,938.45	3,033,895	2,590,091	5,448,847	42.07	129,519
1993	8,690,903.70	3,172,180	2,708,148	5,982,756	42.62	140,374
1994	10,694,792.04	3,769,914	3,218,444	7,476,348	43.17	173,184

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.45 MAINS - OTHER

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 72-R1.5						
NET SALVAGE PERCENT.. 0						
1995	10,666,809.75	3,648,049	3,114,405	7,552,405	43.29	174,461
1996	10,534,532.86	3,465,861	2,958,868	7,575,665	43.86	172,724
1997	13,229,169.97	4,204,230	3,589,227	9,639,943	44.01	219,040
1998	11,374,632.65	3,460,163	2,954,004	8,420,629	44.60	188,803
1999	10,791,011.43	3,154,213	2,692,809	8,098,202	44.79	180,804
2000	9,924,434.65	2,760,978	2,357,097	7,567,338	45.40	166,681
2001	11,760,238.58	3,123,519	2,666,605	9,093,634	45.61	199,378
2002	7,606,682.91	1,921,448	1,640,375	5,966,308	45.85	130,127
2003	11,360,110.67	2,717,338	2,319,841	9,040,270	46.11	196,059
2004	18,166,486.33	4,071,110	3,475,580	14,690,906	46.74	314,311
2005	24,211,346.90	5,113,436	4,365,433	19,845,914	46.67	425,239
2006	13,401,121.78	2,634,661	2,249,258	11,151,864	46.98	237,375
2007	38,023,398.95	6,905,049	5,894,965	32,128,434	47.31	679,105
2008	57,841,540.43	9,671,106	8,256,398	49,585,142	47.32	1,047,869
2009	35,694,237.38	5,432,663	4,637,963	31,056,274	47.36	655,749
2010	47,026,463.54	6,419,112	5,480,112	41,546,352	47.45	875,582
2011	85,360,790.11	10,320,120	8,810,473	76,550,317	47.26	1,619,770
2012	94,539,385.82	9,879,366	8,434,194	86,105,192	47.13	1,826,972
2013	120,085,827.82	10,543,536	9,001,208	111,084,620	46.78	2,374,618
2014	128,604,955.19	9,092,370	7,762,321	120,842,634	46.00	2,627,014
2015	112,673,881.15	5,915,379	5,050,066	107,623,815	45.12	2,385,280
2016	163,971,125.35	5,476,636	4,675,504	159,295,621	43.35	3,674,639
2017	199,980,824.00	2,559,755	2,185,309	197,795,515	38.56	5,129,552
	1,394,646,085.69	192,897,642	164,680,211	1,229,965,875		27,992,889
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						43.9 2.01



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

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-R0.5						
NET SALVAGE PERCENT.. 0						
1903	1.24	1	1			
1912	33.29	33	33			
1914	77.00	77	77			
1920	77.70	78	78			
1928	122.83	122	119	4	0.26	4
1929	405.33	399	390	15	0.75	15
1930	190.60	185	181	10	1.23	8
1931	175.52	169	165	11	1.71	6
1932	568.85	541	529	40	2.18	18
1933	1,407.99	1,325	1,296	112	2.65	42
1934	431.50	402	393	38	3.12	12
1935	380.13	350	342	38	3.57	11
1936	245.34	223	218	27	4.02	7
1938	660.48	589	576	84	4.89	17
1939	846.04	746	730	116	5.31	22
1940	972.64	849	830	143	5.73	25
1941	2,671.15	2,307	2,256	415	6.14	68
1942	5,430.89	4,640	4,538	893	6.55	136
1943	125.05	106	104	21	6.96	3
1944	1,576.66	1,319	1,290	287	7.36	39
1945	771.10	638	624	147	7.76	19
1946	253.00	207	202	51	8.15	6
1947	1,032.59	836	818	215	8.55	25
1948	899.77	721	705	195	8.95	22
1949	1,762.40	1,397	1,366	396	9.34	42
1950	12,544.24	9,829	9,614	2,930	9.74	301
1951	20,376.10	15,785	15,439	4,937	10.14	487
1952	75,046.25	57,485	56,226	18,820	10.53	1,787
1953	82,575.82	62,519	61,150	21,426	10.93	1,960
1954	34,171.77	25,560	25,000	9,172	11.34	809
1955	139,113.40	102,820	100,569	38,544	11.74	3,283
1956	69,200.51	50,516	49,410	19,791	12.15	1,629
1957	87,969.18	63,416	62,027	25,942	12.56	2,065
1958	158,822.77	113,047	110,572	48,251	12.97	3,720
1959	111,412.51	78,261	76,547	34,866	13.39	2,604
1960	243,673.08	168,892	165,194	78,479	13.81	5,683
1961	127,252.17	87,012	85,107	42,145	14.23	2,962
1962	167,725.94	113,084	110,608	57,118	14.66	3,896
1963	158,462.41	105,325	103,019	55,443	15.09	3,674
1964	96,694.62	63,324	61,937	34,758	15.53	2,238
1965	82,445.25	53,186	52,021	30,424	15.97	1,905
1966	126,546.17	80,371	78,611	47,935	16.42	2,919

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

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-R0.5						
NET SALVAGE PERCENT.. 0						
1967	59,704.19	37,322	36,505	23,199	16.87	1,375
1968	62,697.43	38,566	37,722	24,975	17.32	1,442
1969	79,840.58	48,295	47,237	32,604	17.78	1,834
1970	43,359.35	25,775	25,211	18,148	18.25	994
1971	186,932.78	109,169	106,779	80,154	18.72	4,282
1972	148,039.56	84,910	83,051	64,989	19.19	3,387
1973	143,188.60	80,599	78,834	64,355	19.67	3,272
1974	120,753.18	66,682	65,222	55,531	20.15	2,756
1975	114,516.31	61,991	60,634	53,882	20.64	2,611
1976	91,546.98	63,442	62,053	29,494	18.38	1,605
1977	70,658.64	48,359	47,300	23,359	18.67	1,251
1978	70,890.19	47,603	46,561	24,329	19.32	1,259
1979	87,905.64	58,211	56,936	30,970	19.64	1,577
1980	159,677.37	104,189	101,908	57,769	19.97	2,893
1981	185,215.02	118,982	116,377	68,838	20.32	3,388
1982	486,772.67	307,592	300,857	185,916	20.68	8,990
1983	200,677.52	124,621	121,892	78,786	21.06	3,741
1984	194,185.93	118,395	115,803	78,383	21.45	3,654
1985	246,897.52	147,645	144,412	102,486	21.85	4,690
1986	225,232.68	132,662	129,757	95,476	21.98	4,344
1987	211,011.72	121,627	118,964	92,048	22.41	4,107
1988	369,796.42	208,343	203,781	166,015	22.86	7,262
1989	399,684.18	220,985	216,146	183,538	23.05	7,963
1990	295,003.43	159,007	155,525	139,478	23.52	5,930
1991	237,810.48	125,421	122,675	115,135	23.75	4,848
1992	158,077.10	81,030	79,256	78,821	24.25	3,250
1993	224,354.13	112,132	109,677	114,677	24.52	4,677
1994	378,000.34	183,859	179,833	198,167	24.81	7,987
1995	236,809.19	111,892	109,442	127,367	25.12	5,070
1996	484,041.19	221,691	216,837	267,204	25.45	10,499
1997	510,702.49	227,160	222,186	288,516	25.59	11,275
1998	362,349.87	155,448	152,044	210,306	25.95	8,104
1999	702,392.27	291,071	284,697	417,695	26.14	15,979
2000	1,128,089.34	450,108	440,252	687,837	26.36	26,094
2001	323,184.36	123,715	121,006	202,178	26.60	7,601
2002	364,096.20	133,769	130,840	233,256	26.69	8,739
2003	678,169.39	237,970	232,759	445,410	26.82	16,607
2004	521,436.72	173,847	170,040	351,397	26.99	13,020
2005	684,852.41	215,729	211,005	473,847	27.18	17,434
2006	1,689,228.55	503,052	492,037	1,197,192	27.11	44,161
2007	342,340.17	95,239	93,154	249,186	27.24	9,148
2008	1,834,654.33	475,909	465,488	1,369,166	27.13	50,467

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

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-R0.5						
NET SALVAGE PERCENT.. 0						
2009	1,036,822.23	247,593	242,171	794,651	27.09	29,334
2010	1,497,779.16	326,815	319,659	1,178,120	26.87	43,845
2011	2,265,059.39	444,631	434,895	1,830,164	26.61	68,777
2012	1,767,534.52	305,253	298,569	1,468,966	26.35	55,748
2013	3,243,352.81	481,638	471,091	2,772,262	25.80	107,452
2014	12,112,334.76	1,483,761	1,451,271	10,661,064	25.07	425,252
2015	2,821,775.57	265,811	259,990	2,561,786	24.03	106,608
2016	2,237,133.55	140,939	137,853	2,099,281	22.31	94,096
2017	3,633,223.00	96,280	94,172	3,539,051	18.37	192,654
	47,544,942.69	11,515,427	11,263,278	36,281,665		1,515,802
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						23.9 3.19

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 379.1 MEASURING AND REGULATING EQUIPMENT - CITY GATE

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 35-S2.5						
NET SALVAGE PERCENT.. 0						
1976	591.42	523	501	90	5.45	17
1983	32,512.26	26,810	25,665	6,847	7.34	933
1984	1,528.08	1,244	1,191	337	7.65	44
1987	7,476.62	5,815	5,567	1,910	8.71	219
1988	15,907.49	12,107	11,590	4,317	9.26	466
1989	35,024.29	26,153	25,035	9,989	9.67	1,033
1996	48,076.94	29,769	28,497	19,580	13.22	1,481
	141,117.10	102,421	98,046	43,071		4,193
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						10.3 2.97

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 380.3 SERVICES - BARE STEEL

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)
1934	978.78	868	897	82	5.66	14
1935	1,318.36	1,166	1,205	113	5.76	20
1936	3,000.76	2,647	2,736	265	5.85	45
1937	4,535.36	3,993	4,127	408	5.93	69
1938	7,503.85	6,593	6,815	689	6.01	115
1939	12,734.87	11,167	11,542	1,193	6.09	196
1940	11,014.91	9,640	9,964	1,051	6.16	171
1941	13,838.89	12,091	12,497	1,342	6.22	216
1942	14,119.88	12,315	12,729	1,391	6.28	221
1943	6,060.51	5,277	5,454	607	6.34	96
1944	4,684.43	4,072	4,209	475	6.39	74
1945	5,121.80	4,444	4,593	529	6.45	82
1946	13,910.86	12,051	12,456	1,455	6.50	224
1947	27,206.40	23,534	24,325	2,881	6.54	441
1948	35,642.74	30,778	31,812	3,831	6.59	581
1949	52,900.99	45,609	47,141	5,760	6.63	869
1950	69,604.38	59,899	61,912	7,692	6.68	1,151
1951	88,588.02	76,108	78,665	9,923	6.72	1,477
1952	95,902.87	82,251	85,014	10,889	6.76	1,611
1953	90,180.25	77,224	79,819	10,361	6.79	1,526
1954	142,029.91	121,403	125,482	16,548	6.83	2,423
	700,878.82	603,130	623,394	77,485		11,622

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.7 1.66

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 380.45 SERVICES - OTHER

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						
1955	222,298.78	151,474	156,563	65,736	15.93	4,127
1956	282,982.65	190,391	196,788	86,195	16.36	5,269
1957	266,454.21	176,926	182,870	83,584	16.80	4,975
1958	336,048.42	220,246	227,646	108,402	17.23	6,291
1959	447,448.37	289,320	299,041	148,407	17.67	8,399
1960	481,311.25	306,884	317,195	164,116	18.12	9,057
1961	537,595.33	337,932	349,286	188,309	18.57	10,140
1962	553,267.10	342,804	354,322	198,945	19.02	10,460
1963	673,419.30	411,055	424,866	248,553	19.48	12,759
1964	683,443.88	410,886	424,691	258,753	19.94	12,977
1965	667,214.45	394,991	408,262	258,952	20.40	12,694
1966	912,945.89	531,882	549,752	363,194	20.87	17,403
1967	921,420.55	527,974	545,713	375,708	21.35	17,598
1968	991,249.96	558,470	577,234	414,016	21.83	18,965
1969	735,611.02	407,381	421,068	314,543	22.31	14,099
1970	554,604.73	301,705	311,842	242,763	22.80	10,648
1971	604,396.95	322,869	333,717	270,680	23.29	11,622
1972	619,819.09	324,909	335,825	283,994	23.79	11,938
1973	492,500.99	253,146	261,651	230,850	24.30	9,500
1974	114,182.36	57,548	59,482	54,700	24.80	2,206
1975	242,220.56	119,560	123,577	118,644	25.32	4,686
1976	704,319.13	458,934	474,353	229,966	22.19	10,363
1977	2,393,466.06	1,541,392	1,593,180	800,286	22.39	35,743
1978	1,705,419.31	1,077,825	1,114,038	591,381	23.00	25,712
1979	2,200,912.01	1,372,709	1,418,830	782,082	23.23	33,667
1980	3,140,730.37	1,931,549	1,996,446	1,144,284	23.48	48,734
1981	3,371,466.53	2,030,297	2,098,512	1,272,955	24.11	52,798
1982	2,862,630.00	1,696,967	1,753,982	1,108,648	24.38	45,474
1983	2,651,601.34	1,545,884	1,597,823	1,053,778	24.67	42,715
1984	3,082,988.84	1,765,936	1,825,269	1,257,720	24.98	50,349
1985	3,441,746.21	1,934,950	1,999,961	1,441,785	25.31	56,965
1986	3,927,933.53	2,165,077	2,237,820	1,690,114	25.65	65,891
1987	4,518,676.19	2,439,181	2,521,134	1,997,542	26.00	76,829
1988	5,419,219.73	2,861,348	2,957,485	2,461,735	26.37	93,354
1989	5,230,218.54	2,697,747	2,788,387	2,441,832	26.75	91,283
1990	5,460,549.04	2,747,748	2,840,068	2,620,481	27.15	96,519
1991	5,085,086.59	2,506,439	2,590,651	2,494,436	27.26	91,505
1992	5,816,183.02	2,788,278	2,881,960	2,934,223	27.69	105,967
1993	6,105,365.23	2,857,311	2,953,312	3,152,053	27.85	113,180
1994	7,225,686.42	3,277,571	3,387,692	3,837,994	28.31	135,570
1995	6,836,655.14	3,014,965	3,116,263	3,720,392	28.52	130,449
1996	6,392,356.09	2,734,650	2,826,530	3,565,826	28.75	124,029

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 380.45 SERVICES - OTHER

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						
1997	6,848,721.83	2,836,056	2,931,343	3,917,379	29.00	135,082
1998	7,345,924.99	2,936,901	3,035,576	4,310,349	29.28	147,211
1999	7,672,281.78	2,952,294	3,051,486	4,620,796	29.58	156,214
2000	7,543,803.98	2,798,751	2,892,785	4,651,019	29.67	156,758
2001	7,262,366.72	2,588,307	2,675,270	4,587,097	29.80	153,929
2002	6,427,596.04	2,191,810	2,265,451	4,162,145	29.95	138,970
2003	6,093,164.18	1,979,060	2,045,553	4,047,611	30.14	134,294
2004	9,824,670.87	3,037,788	3,139,853	6,684,818	30.17	221,572
2005	8,946,897.81	2,616,968	2,704,894	6,242,004	30.24	206,415
2006	9,580,874.12	2,644,321	2,733,166	6,847,708	30.17	226,971
2007	13,584,683.80	3,508,924	3,626,818	9,957,866	30.15	330,277
2008	15,357,508.84	3,691,945	3,815,988	11,541,521	30.02	384,461
2009	14,289,072.65	3,157,885	3,263,985	11,025,088	29.96	367,994
2010	16,774,270.84	3,385,048	3,498,780	13,275,491	29.67	447,438
2011	23,711,839.35	4,301,328	4,445,846	19,265,993	29.34	656,646
2012	29,874,128.73	4,764,924	4,925,018	24,949,111	28.98	860,908
2013	35,765,004.91	4,906,959	5,071,825	30,693,180	28.29	1,084,948
2014	37,633,029.25	4,252,532	4,395,410	33,237,619	27.46	1,210,401
2015	43,035,608.86	3,735,491	3,860,997	39,174,612	26.32	1,488,397
2016	38,989,321.73	2,257,482	2,333,330	36,655,992	24.41	1,501,679
2017	44,207,247.00	1,069,815	1,105,759	43,101,488	20.12	2,142,221
	489,681,663.44	117,699,700	121,654,220	368,027,443		13,895,695
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						26.5 2.84

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

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 43-S1.5						
NET SALVAGE PERCENT.. 0						
1915	10.80	11	11			
1916	53.16	53	53			
1917	161.23	161	161			
1918	647.63	648	648			
1919	440.13	440	440			
1920	259.86	260	260			
1921	570.45	570	570			
1922	1,333.66	1,334	1,334			
1923	1,518.22	1,518	1,518			
1924	1,313.20	1,313	1,313			
1925	2,740.15	2,740	2,740			
1926	3,233.10	3,233	3,233			
1927	4,071.28	4,071	4,071			
1928	5,100.40	5,100	5,100			
1929	4,390.83	4,391	4,391			
1930	340.32	340	340			
1931	21.77	22	22			
1934	114.56	113	115			
1935	23.76	23	24			
1936	417.81	406	415	3	1.18	3
1937	68.70	66	67	2	1.44	1
1938	207.96	200	204	4	1.70	2
1939	381.45	364	372	9	1.96	5
1941	1,931.19	1,820	1,861	70	2.47	28
1942	2,999.53	2,810	2,873	127	2.72	47
1943	1,733.01	1,613	1,649	84	2.97	28
1944	108.12	100	102	6	3.23	2
1945	644.20	592	605	39	3.48	11
1946	3,898.15	3,560	3,640	258	3.73	69
1947	2,110.41	1,915	1,958	152	3.99	38
1948	14,561.03	13,125	13,418	1,143	4.24	270
1949	15,744.07	14,100	14,415	1,329	4.49	296
1950	27,413.78	24,385	24,930	2,484	4.75	523
1951	51,905.78	45,858	46,883	5,023	5.01	1,003
1952	33,264.53	29,188	29,840	3,425	5.27	650
1953	18,101.13	15,773	16,125	1,976	5.53	357
1954	51,117.76	44,235	45,223	5,895	5.79	1,018
1955	64,368.29	55,297	56,533	7,835	6.06	1,293
1956	30,028.81	25,608	26,180	3,849	6.33	608
1957	160,745.54	136,036	139,076	21,670	6.61	3,278
1958	167,200.03	140,410	143,547	23,653	6.89	3,433
1959	170,065.19	141,709	144,875	25,190	7.17	3,513



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

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 43-S1.5						
NET SALVAGE PERCENT.. 0						
1960	192,173.49	158,833	162,382	29,791	7.46	3,993
1961	238,886.85	195,832	200,208	38,679	7.75	4,991
1962	222,299.26	180,683	184,720	37,579	8.05	4,668
1963	142,782.60	115,056	117,627	25,156	8.35	3,013
1964	207,795.01	165,945	169,653	38,142	8.66	4,404
1965	257,309.54	203,573	208,122	49,188	8.98	5,478
1966	304,651.38	238,761	244,096	60,555	9.30	6,511
1967	288,960.00	224,247	229,258	59,702	9.63	6,200
1968	205,991.61	158,278	161,815	44,177	9.96	4,435
1969	217,679.61	165,487	169,185	48,495	10.31	4,704
1970	187,877.82	141,301	144,458	43,420	10.66	4,073
1971	300,484.93	223,477	228,470	72,015	11.02	6,535
1972	250,738.93	184,323	188,441	62,298	11.39	5,470
1973	143,825.49	104,458	106,792	37,033	11.77	3,146
1974	188,620.35	135,324	138,348	50,272	12.15	4,138
1975	231,540.58	163,963	167,627	63,914	12.55	5,093
1976	109,380.63	85,339	87,246	22,135	11.69	1,893
1977	188,830.70	146,079	149,343	39,488	11.85	3,332
1978	189,343.14	144,355	147,580	41,763	12.31	3,393
1979	310,146.47	234,037	239,266	70,880	12.52	5,661
1980	614,500.78	456,267	466,462	148,039	13.01	11,379
1981	665,051.27	487,882	498,783	166,268	13.25	12,549
1982	452,247.75	325,890	333,172	119,076	13.76	8,654
1983	334,113.99	237,455	242,761	91,353	14.04	6,507
1984	451,464.24	316,115	323,178	128,286	14.34	8,946
1985	562,248.55	385,590	394,206	168,043	14.89	11,286
1986	615,376.56	414,825	424,094	191,283	15.23	12,560
1987	626,299.00	414,485	423,746	202,553	15.59	12,992
1988	693,337.00	447,896	457,904	235,433	16.16	14,569
1989	801,784.63	507,289	518,624	283,161	16.55	17,109
1990	506,011.81	313,120	320,116	185,896	16.94	10,974
1991	568,699.21	342,129	349,773	218,926	17.55	12,474
1992	841,829.79	493,733	504,765	337,065	17.98	18,747
1993	970,952.16	554,219	566,602	404,350	18.42	21,952
1994	401,359.33	222,594	227,568	173,791	18.87	9,210
1995	8,108.75	4,342	4,439	3,670	19.52	188
1996	1,746,371.35	904,970	925,190	821,181	19.99	41,080
1997	766,255.28	383,281	391,845	374,410	20.48	18,282
1998	1,074,598.28	515,485	527,003	547,595	21.15	25,891
1999	1,223,326.73	563,464	576,054	647,273	21.66	29,883
2000	77,430.54	34,147	34,910	42,521	22.18	1,917
2001	520,105.95	217,976	222,846	297,260	22.87	12,998

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

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 43-S1.5						
NET SALVAGE PERCENT.. 0						
2002	1,171,290.29	466,642	477,069	694,221	23.41	29,655
2003	857,903.70	322,229	329,429	528,475	24.11	21,919
2004	1,189,983.06	419,350	428,720	761,263	24.81	30,684
2005	395,938.74	130,185	133,094	262,845	25.52	10,300
2006	627,465.52	191,942	196,231	431,235	26.09	16,529
2007	1,035,156.50	291,293	297,802	737,354	26.81	27,503
2008	1,084,660.27	278,215	284,431	800,229	27.54	29,057
2009	1,426,093.18	328,572	335,913	1,090,180	28.40	38,387
2010	1,148,330.44	235,178	240,433	907,897	29.13	31,167
2011	1,056,443.65	188,892	193,113	863,331	29.86	28,913
2012	1,380,409.84	209,546	214,228	1,166,182	30.73	37,949
2013	1,311,396.65	163,400	167,051	1,144,346	31.60	36,213
2014	1,191,598.05	115,942	118,532	1,073,066	32.47	33,048
2015	1,380,319.19	96,346	98,499	1,281,820	33.34	38,447
2016	1,249,990.99	52,500	53,673	1,196,318	34.21	34,970
2017	1,461,481.00	20,461	20,918	1,440,563	35.21	40,913
	37,714,613.39	16,148,709	16,508,949	21,205,664		913,408
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						23.2 2.42

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381.1 METERS - AMR

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-S2.5						
NET SALVAGE PERCENT.. 0						
2000	273,738.41	241,437	237,952	35,786	2.34	15,293
2001	261,148.82	225,371	222,118	39,031	2.62	14,897
2003	493.15	403	397	96	3.23	30
2004	104,403.16	82,458	81,268	23,135	3.59	6,444
2005	164,964.86	124,961	123,157	41,808	4.00	10,452
2007	106,051.54	72,051	71,011	35,041	4.96	7,065
2008	481,274.00	304,502	300,107	181,167	5.52	32,820
2009	418,396.39	242,921	239,415	178,981	6.14	29,150
2010	821,982.19	430,308	424,097	397,885	6.83	58,255
2011	11,240,739.38	5,195,470	5,120,475	6,120,264	7.56	809,559
2012	8,726,541.91	3,460,947	3,410,990	5,315,552	8.37	635,072
2014	306,892.38	78,626	77,491	229,401	10.16	22,579
2015	372,428.37	68,452	67,464	304,964	11.10	27,474
2016	499,998.57	55,200	54,403	445,596	12.09	36,857
2017	510,000.00	18,768	18,497	491,503	13.09	37,548
	24,289,053.13	10,601,875	10,448,842	13,840,211		1,743,495
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						7.9 7.18

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 382 METER INSTALLATIONS

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-R2.5						
NET SALVAGE PERCENT.. 0						
1937	5,301.62	4,784	5,095	207	5.37	39
1938	11,251.48	10,108	10,764	487	5.59	87
1939	8,350.42	7,467	7,952	398	5.82	68
1940	7,372.00	6,561	6,987	385	6.05	64
1941	10,515.73	9,315	9,920	596	6.28	95
1942	7,902.14	6,967	7,419	483	6.51	74
1943	3,592.24	3,151	3,356	236	6.75	35
1944	3,639.29	3,177	3,383	256	6.99	37
1945	4,847.01	4,209	4,482	365	7.24	50
1946	11,783.44	10,179	10,840	943	7.49	126
1947	17,221.95	14,795	15,756	1,466	7.75	189
1948	21,956.20	18,755	19,973	1,983	8.02	247
1949	28,426.97	24,142	25,709	2,718	8.29	328
1950	33,147.07	27,982	29,799	3,348	8.57	391
1951	28,989.76	24,320	25,899	3,091	8.86	349
1952	30,279.59	25,237	26,876	3,404	9.16	372
1953	36,315.90	30,063	32,015	4,301	9.47	454
1954	34,200.02	28,106	29,931	4,269	9.80	436
1955	43,035.30	35,101	37,380	5,655	10.14	558
1956	45,525.17	36,842	39,234	6,291	10.49	600
1957	41,937.09	33,657	35,842	6,095	10.86	561
1958	54,800.06	43,601	46,432	8,368	11.24	744
1959	65,597.10	51,727	55,085	10,512	11.63	904
1960	47,892.19	37,408	39,837	8,055	12.04	669
1961	41,554.25	32,133	34,219	7,335	12.47	588
1962	59,526.70	45,554	48,512	11,015	12.91	853
1963	63,483.83	48,052	51,172	12,312	13.37	921
1964	114,020.31	85,308	90,847	23,173	13.85	1,673
1965	151,525.53	112,018	119,291	32,235	14.34	2,248
1966	140,591.72	102,632	109,295	31,297	14.85	2,108
1967	129,803.67	93,530	99,602	30,202	15.37	1,965
1968	166,760.09	118,551	126,248	40,512	15.90	2,548
1969	157,997.79	110,714	117,902	40,096	16.46	2,436
1970	144,922.36	100,076	106,573	38,349	17.02	2,253
1971	126,713.94	86,165	91,759	34,955	17.60	1,986
1972	79,733.08	53,349	56,813	22,920	18.20	1,259
1973	74,145.25	48,801	51,969	22,176	18.80	1,180
1974	13,812.47	8,935	9,515	4,297	19.42	221
1975	25,032.44	15,902	16,934	8,098	20.06	404
1976	48,969.06	33,936	36,139	12,830	18.38	698
1977	55,298.48	37,625	40,068	15,230	19.02	801
1978	52,036.10	34,739	36,994	15,042	19.67	765

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 382 METER INSTALLATIONS

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-R2.5						
NET SALVAGE PERCENT.. 0						
1979	132,628.11	86,805	92,441	40,187	20.32	1,978
1980	327,475.31	211,222	224,936	102,539	20.64	4,968
1981	409,721.18	258,698	275,494	134,227	21.31	6,299
1982	320,876.93	198,206	211,075	109,802	21.97	4,998
1983	372,207.18	224,739	239,330	132,877	22.64	5,869
1984	447,819.73	265,557	282,798	165,022	22.99	7,178
1985	462,790.10	267,724	285,106	177,684	23.68	7,504
1986	535,927.45	302,156	321,774	214,153	24.37	8,788
1987	602,217.12	330,617	352,082	250,135	25.06	9,981
1988	678,747.79	364,420	388,080	290,668	25.45	11,421
1989	769,338.36	401,287	427,341	341,997	26.14	13,083
1990	780,941.78	395,157	420,813	360,129	26.85	13,413
1991	700,078.72	343,179	365,460	334,619	27.56	12,141
1992	764,050.18	362,389	385,917	378,133	28.26	13,381
1993	647,432.82	298,208	317,569	329,864	28.69	11,498
1994	750,345.33	333,303	354,943	395,402	29.41	13,444
1995	661,217.92	282,671	301,024	360,194	30.13	11,955
1996	753,704.70	311,129	331,329	422,376	30.58	13,812
1997	720,934.85	285,202	303,719	417,216	31.32	13,321
1998	618,616.49	234,023	249,217	369,399	32.05	11,526
1999	519,811.52	187,548	199,725	320,087	32.78	9,765
2000	1,145,178.08	394,857	420,493	724,685	33.26	21,788
2001	1,043,905.42	341,044	363,186	680,719	34.01	20,015
2002	1,001,248.98	308,785	328,833	672,416	34.75	19,350
2003	1,099,031.23	320,258	341,051	757,980	35.25	21,503
2004	1,075,945.62	293,410	312,460	763,486	36.00	21,208
2005	1,191,336.99	303,791	323,515	867,822	36.52	23,763
2006	1,247,540.98	294,170	313,269	934,272	37.28	25,061
2007	1,475,917.72	320,865	341,697	1,134,221	37.81	29,998
2008	1,432,287.82	283,020	301,395	1,130,893	38.58	29,313
2009	1,883,838.00	336,265	358,097	1,525,741	39.12	39,002
2010	1,505,557.10	239,384	254,926	1,250,631	39.67	31,526
2011	1,468,137.55	204,218	217,477	1,250,661	40.23	31,088
2012	1,670,128.26	198,411	211,293	1,458,835	40.80	35,756
2013	1,026,434.99	101,206	107,777	918,658	41.16	22,319
2014	1,236,830.92	96,102	102,341	1,134,490	41.55	27,304

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 382 METER INSTALLATIONS

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-R2.5						
NET SALVAGE PERCENT.. 0						
2015	1,356,702.08	76,654	81,631	1,275,071	41.75	30,541
2016	1,248,972.35	43,464	46,286	1,202,686	41.60	28,911
2017	1,440,579.00	17,575	18,716	1,421,863	40.32	35,264
	37,776,263.47	11,783,393	12,548,434	25,227,829		732,417
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						34.4 1.94

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 383 HOUSE REGULATORS

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-S2						
NET SALVAGE PERCENT.. 0						
1949	33.51	32	34			
1955	331.39	303	331			
1957	386.07	348	380	6	3.93	2
1958	560.95	502	548	13	4.17	3
1960	432.96	383	418	15	4.66	3
1961	761.22	668	729	32	4.91	7
1962	5,954.61	5,185	5,657	298	5.17	58
1963	9,500.33	8,211	8,958	542	5.43	100
1964	13,588.83	11,652	12,712	877	5.70	154
1965	17,142.16	14,579	15,906	1,236	5.98	207
1966	43,859.97	36,996	40,362	3,498	6.26	559
1967	34,367.52	28,731	31,345	3,023	6.56	461
1968	45,480.02	37,692	41,122	4,358	6.85	636
1969	41,935.95	34,429	37,562	4,374	7.16	611
1970	45,805.29	37,251	40,641	5,164	7.47	691
1971	38,897.31	31,312	34,161	4,736	7.80	607
1972	22,601.66	18,008	19,647	2,955	8.13	363
1973	20,062.76	15,814	17,253	2,810	8.47	332
1974	2,358.65	1,839	2,006	353	8.82	40
1975	2,056.03	1,584	1,728	328	9.18	36
1976	4,108.90	3,393	3,702	407	8.75	47
1977	4,358.82	3,566	3,890	469	9.00	52
1978	6,433.86	5,210	5,684	750	9.28	81
1979	14,208.19	11,378	12,413	1,795	9.58	187
1980	32,656.08	25,717	28,057	4,599	10.12	454
1981	46,618.11	36,241	39,539	7,079	10.45	677
1982	43,627.48	33,454	36,498	7,129	10.80	660
1983	44,550.21	33,662	36,725	7,825	11.16	701
1984	47,851.43	35,587	38,825	9,026	11.55	781
1985	49,107.41	35,907	39,174	9,933	11.95	831
1986	63,822.63	45,837	50,008	13,815	12.36	1,118
1987	69,170.71	48,738	53,173	15,998	12.79	1,251
1988	85,821.97	59,243	64,634	21,188	13.24	1,600
1989	92,106.69	62,209	67,869	24,238	13.70	1,769
1990	89,712.91	59,211	64,599	25,114	14.17	1,772
1991	74,877.91	48,221	52,609	22,269	14.65	1,520
1992	82,325.19	51,643	56,342	25,983	15.15	1,715
1993	59,339.82	36,197	39,491	19,849	15.66	1,267
1994	71,881.28	42,568	46,441	25,440	16.18	1,572
1995	80,259.19	46,053	50,243	30,016	16.71	1,796
1996	84,977.57	47,137	51,426	33,552	17.26	1,944
1997	98,351.12	52,421	57,191	41,160	17.96	2,292

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 383 HOUSE REGULATORS

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-S2						
NET SALVAGE PERCENT.. 0						
1998	36,271.47	18,600	20,292	15,979	18.52	863
1999	19,048.85	9,374	10,227	8,822	19.09	462
2000	178,537.25	83,734	91,353	87,184	19.81	4,401
2001	69,392.05	30,914	33,727	35,665	20.54	1,736
2002	377,072.60	158,974	173,439	203,634	21.26	9,578
2003	545,355.73	216,670	236,385	308,971	22.00	14,044
2004	841,249.50	313,450	341,971	499,278	22.73	21,966
2005	677,109.89	234,415	255,745	421,365	23.60	17,854
2006	665,294.97	213,427	232,847	432,448	24.34	17,767
2007	736,970.96	216,669	236,384	500,587	25.21	19,857
2008	553,828.09	147,872	161,327	392,501	26.09	15,044
2009	785,480.20	188,280	205,412	580,068	26.96	21,516
2010	637,032.93	134,732	146,992	490,041	27.96	17,527
2011	673,860.76	123,990	135,272	538,589	28.83	18,682
2012	693,320.04	107,881	117,697	575,623	29.84	19,290
2013	507,715.03	64,886	70,790	436,925	30.71	14,227
2014	641,943.95	63,809	69,615	572,329	31.71	18,049
2015	537,737.92	38,179	41,653	496,085	32.71	15,166
2016	599,997.72	25,560	27,886	572,112	33.71	16,972
2017	677,869.00	9,626	10,502	667,367	34.71	19,227
	12,047,373.58	3,510,154	3,829,549	8,217,825		313,185
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						26.2 2.60



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 384 HOUSE REGULATOR INSTALLATIONS

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 35-S3						
NET SALVAGE PERCENT.. 0						
1956	4,098.01	3,976	4,098			
1957	11,093.12	10,719	11,093			
1958	8,984.62	8,646	8,985			
1959	10,504.99	10,067	10,505			
1960	6,886.85	6,570	6,887			
1961	5,770.97	5,481	5,771			
1962	6,336.36	5,991	6,336			
1963	9,429.02	8,871	9,429			
1964	13,020.68	12,187	13,021			
1965	14,473.42	13,477	14,473			
1966	13,305.16	12,321	13,305			
1967	17,106.02	15,752	17,106			
1968	26,484.46	24,245	26,484			
1969	37,452.06	34,071	37,452			
1970	54,867.42	49,584	54,867			
1971	52,330.89	46,978	52,331			
1972	30,594.70	27,264	30,595			
1973	41,286.72	36,521	41,106	181	4.04	45
1974	15,958.45	14,007	15,766	192	4.28	45
1975	25,717.11	22,381	25,191	526	4.54	116
1976	13,626.03	12,272	13,626			
1978	1,304.20	1,159	1,304			
1979	41,749.48	36,648	41,252	497	5.36	93
1980	78,231.18	68,061	76,611	1,620	5.60	289
1981	103,540.67	89,190	100,395	3,146	5.87	536
1982	111,541.38	95,033	106,972	4,569	6.17	741
1983	94,279.56	79,365	89,335	4,945	6.48	763
1984	100,051.83	83,123	93,565	6,487	6.82	951
1985	116,774.98	95,639	107,654	9,121	7.18	1,270
1986	125,389.90	101,114	113,816	11,574	7.56	1,531
1987	160,772.64	127,493	143,509	17,264	7.96	2,169
1988	175,315.37	136,010	153,096	22,219	8.52	2,608
1989	145,310.01	110,581	124,473	20,837	8.95	2,328
1990	142,228.97	105,989	119,304	22,925	9.40	2,439
1991	135,142.11	98,492	110,865	24,277	9.86	2,462
1992	132,043.34	93,606	105,365	26,678	10.47	2,548
1993	112,250.88	77,554	87,297	24,954	10.96	2,277
1994	183,968.70	123,222	138,702	45,267	11.59	3,906
1995	147,476.46	95,565	107,570	39,906	12.22	3,266
1996	122,299.49	76,511	86,123	36,176	12.87	2,811
1997	182,246.23	109,457	123,208	59,038	13.63	4,331
1998	181,143.04	104,556	117,691	63,452	14.28	4,443

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 384 HOUSE REGULATOR INSTALLATIONS

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 35-S3						
NET SALVAGE PERCENT.. 0						
1999	139,857.78	77,104	86,790	53,068	15.06	3,524
2000	194,710.12	102,223	115,065	79,645	15.83	5,031
2001	229,158.59	113,800	128,096	101,063	16.72	6,044
2002	154,765.04	72,446	81,547	73,218	17.61	4,158
2003	133,893.06	59,020	66,434	67,459	18.39	3,668
	3,864,772.07	2,714,342	3,044,466	820,306		64,393
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						12.7 1.67

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT - OTHER  
THAN METERS

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 30-R0.5						
NET SALVAGE PERCENT.. 0						
1890	20.62	21	21			
1893	23.38	23	23			
1902	23.47	23	23			
1922	10.51	11	11			
1928	107.49	107	107			
1929	742.40	742	742			
1930	764.98	765	765			
1931	22.60	23	23			
1933	253.61	254	254			
1934	12.03	12	12			
1935	117.72	118	118			
1937	1,130.26	1,130	1,130			
1938	213.44	213	213			
1939	265.20	265	265			
1941	366.30	366	366			
1942	659.98	660	660			
1943	4,172.20	4,172	4,172			
1944	953.08	953	953			
1945	666.22	666	666			
1946	56.98	57	57			
1947	805.54	806	806			
1948	1,490.10	1,490	1,490			
1950	1,944.73	1,945	1,945			
1951	4,782.16	4,782	4,782			
1952	4,042.32	4,042	4,042			
1953	5,352.03	5,352	5,352			
1954	13,773.65	13,774	13,774			
1955	24,361.98	24,362	24,362			
1956	22,892.38	22,892	22,892			
1957	28,113.65	28,114	28,114			
1958	27,297.67	27,070	26,893	405	0.25	405
1959	23,750.49	23,165	23,013	737	0.74	737
1960	33,232.57	31,881	31,672	1,561	1.22	1,280
1961	36,464.85	34,411	34,186	2,279	1.69	1,349
1962	13,647.16	12,669	12,586	1,061	2.15	493
1963	38,735.45	35,365	35,133	3,602	2.61	1,380
1964	31,961.65	28,723	28,535	3,427	3.04	1,127
1965	35,569.47	31,455	31,249	4,320	3.47	1,245
1966	27,806.08	24,200	24,042	3,764	3.89	968
1967	62,323.10	53,390	53,040	9,283	4.30	2,159
1968	56,154.89	47,357	47,047	9,108	4.70	1,938

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT - OTHER  
THAN METERS

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 30-R0.5						
NET SALVAGE PERCENT.. 0						
1969	54,264.30	45,039	44,744	9,520	5.10	1,867
1970	50,933.64	41,596	41,324	9,610	5.50	1,747
1971	110,413.97	88,699	88,118	22,296	5.90	3,779
1972	86,410.97	68,293	67,846	18,565	6.29	2,952
1973	44,325.92	34,441	34,216	10,110	6.69	1,511
1974	27,953.50	21,347	21,207	6,746	7.09	951
1975	25,156.02	18,875	18,751	6,405	7.49	855
1976	731.44	622	618	113	7.28	16
1977	2,869.22	2,406	2,390	479	7.81	61
1978	11,139.95	9,241	9,180	1,960	8.12	241
1979	35,258.19	28,912	28,723	6,535	8.45	773
1980	78,776.00	63,809	63,391	15,385	8.80	1,748
1981	114,983.65	91,918	91,316	23,668	9.16	2,584
1982	111,334.30	87,743	87,169	24,165	9.55	2,530
1983	72,952.63	56,881	56,509	16,444	9.75	1,687
1984	33,476.54	25,683	25,515	7,962	10.17	783
1985	45,200.93	34,082	33,859	11,342	10.60	1,070
1986	91,011.75	67,658	67,215	23,797	10.87	2,189
1987	19,632.84	14,312	14,218	5,415	11.34	478
1988	61,482.25	44,070	43,781	17,701	11.65	1,519
1989	71,508.72	50,342	50,012	21,497	11.98	1,794
1990	69,755.74	48,145	47,830	21,926	12.34	1,777
1991	140,704.17	95,088	94,465	46,239	12.71	3,638
1992	90,051.91	59,470	59,081	30,971	13.11	2,362
1993	121,994.89	78,614	78,099	43,896	13.52	3,247
1994	180,050.49	113,396	112,654	67,396	13.81	4,880
1995	130,790.15	80,331	79,805	50,985	14.13	3,608
1996	180,612.19	107,573	106,869	73,743	14.60	5,051
1997	127,571.92	73,749	73,266	54,306	14.96	3,630
1998	150,271.21	84,392	83,840	66,431	15.22	4,365
1999	62,526.30	33,889	33,667	28,859	15.63	1,846
2000	163,461.21	85,523	84,963	78,498	15.95	4,922
2001	18,399.38	9,259	9,198	9,201	16.29	565
2002	295,017.45	142,670	141,736	153,281	16.55	9,262
2003	517,771.76	239,521	237,953	279,819	16.85	16,606
2004	15,758.39	6,956	6,910	8,848	17.08	518
2005	65,820.90	27,566	27,386	38,435	17.35	2,215
2006	210,850.27	83,412	82,866	127,984	17.57	7,284
2007	243,109.79	90,096	89,506	153,604	17.83	8,615
2008	241,331.52	83,452	82,906	158,426	17.97	8,816
2009	141,751.69	45,304	45,007	96,745	18.10	5,345

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT - OTHER  
THAN METERS

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 30-R0.5						
NET SALVAGE PERCENT.. 0						
2010	309,936.38	90,656	90,063	219,873	18.14	12,121
2011	209,203.55	55,209	54,848	154,356	18.13	8,514
2012	211,695.79	49,494	49,170	162,526	18.03	9,014
2013	295,696.43	59,612	59,221	236,475	17.82	13,270
2014	190,772.40	31,916	31,707	159,065	17.42	9,131
2015	219,024.62	28,364	28,178	190,847	16.81	11,353
2016	149,696.62	13,069	12,984	136,713	15.68	8,719
2017	163,936.00	6,098	6,058	157,878	12.92	12,220
	6,572,464.24	3,286,619	3,265,874	3,306,590		227,110
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 14.6						3.46

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 387 OTHER EQUIPMENT - GENERAL

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 30-R0.5						
NET SALVAGE PERCENT.. 0						
1941	38.38	38	38			
1942	67.31	67	67			
1950	90.19	90	90			
1955	4,288.05	4,288	4,288			
1957	14,374.70	14,375	14,375			
1959	188.29	184	188			
1962	7,626.48	7,080	7,555	71	2.15	33
1967	445.13	381	407	38	4.30	9
1972	7,910.24	6,252	6,671	1,239	6.29	197
1981	13,548.93	10,831	11,557	1,992	9.16	217
1985	14,556.64	10,976	11,712	2,845	10.60	268
1992	2,228.63	1,472	1,571	658	13.11	50
2010	68,488.09	20,033	21,377	47,111	18.14	2,597
	133,851.06	76,067	79,896	53,955		3,371

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.0 2.52

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 387.4 OTHER EQUIPMENT - CUSTOMER INFORMATION 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 25-R2.5						
NET SALVAGE PERCENT.. 0						
1973	917.13	899	826	91	0.50	91
1974	11,561.27	11,210	10,294	1,267	0.76	1,267
1975	3,189.09	3,058	2,808	381	1.03	370
1976	6,308.81	6,126	5,626	683	1.24	551
1980	1,144.78	1,082	994	151	2.18	69
1983	10,695.21	9,889	9,081	1,614	2.81	574
1984	4,730.23	4,342	3,987	743	3.00	248
1985	27,353.09	24,891	22,857	4,496	3.21	1,401
1986	61,596.14	55,492	50,958	10,638	3.47	3,066
1987	40,005.58	35,749	32,828	7,178	3.63	1,977
1989	3,425.59	2,978	2,735	691	4.29	161
1990	37,952.71	32,563	29,903	8,050	4.55	1,769
1991	31,594.95	26,710	24,528	7,067	4.85	1,457
1992	6,510.50	5,396	4,955	1,556	5.27	295
1993	1,718.09	1,397	1,283	435	5.62	77
1994	4,082.11	3,242	2,977	1,105	6.09	181
2000	50,178.60	32,927	30,237	19,942	9.17	2,175
2001	142,467.12	89,555	82,238	60,229	9.75	6,177
2003	2,326.24	1,325	1,217	1,109	10.95	101
2004	119,576.43	64,404	59,142	60,434	11.56	5,228
2005	238,393.08	120,675	110,816	127,577	12.19	10,466
2006	8,389.16	3,965	3,641	4,748	12.83	370
2007	22,252.02	9,742	8,946	13,306	13.48	987
2008	0.11					
2009	13,302.75	4,850	4,454	8,849	14.81	598
2010	58,684.63	19,190	17,622	41,063	15.44	2,660
2011	109,605.60	31,490	28,917	80,689	16.12	5,006
2012	163,197.40	40,310	37,017	126,180	16.77	7,524
2013	684,641.61	140,762	129,262	555,380	17.38	31,955
2014	2,020,467.58	329,538	302,614	1,717,854	17.96	95,649
2015	448,075.50	53,321	48,965	399,110	18.51	21,562
	4,334,343.11	1,167,078	1,071,728	3,262,615		204,012

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.0 4.71

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 387.5 OTHER EQUIPMENT - GPS 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-S3						
NET SALVAGE PERCENT.. 0						
2014	2,006,009.00	749,846	626,374	1,379,635	5.86	235,433
2015	43,563.00	11,684	9,760	33,803	6.82	4,956
2016	806,357.00	129,904	108,514	697,843	7.81	89,352
2017	1,486,996.00	79,852	66,703	1,420,293	8.81	161,214
	4,342,925.00	971,286	811,351	3,531,574		490,955
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.2						11.30



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 390.1 STRUCTURES AND IMPROVEMENTS - COMMUNICATIONS

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-R2.5						
NET SALVAGE PERCENT.. 0						
1955	1,170.54	1,082	1,141	30	3.04	10
1958	192.08	174	183	9	3.69	2
1959	2,129.94	1,922	2,026	104	3.91	27
1971	17,971.09	14,817	15,623	2,348	7.02	334
1983	7,872.27	5,948	6,271	1,601	11.16	143
1984	3,449.87	2,554	2,693	757	11.75	64
1987	6,786.87	4,720	4,977	1,810	13.36	135
1988	9,428.54	6,425	6,774	2,655	13.79	193
1989	9,423.51	6,257	6,597	2,827	14.42	196
1990	45,343.53	29,428	31,028	14,316	14.87	963
1991	16,302.22	10,282	10,841	5,461	15.52	352
	120,070.46	83,609	88,154	31,916		2,419
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						13.2 2.01

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 391.1 OFFICE FURNITURE AND EQUIPMENT - FURNITURE

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	480,955.49	468,932	467,765	13,190	0.50	13,190
1999	80,599.29	74,554	74,368	6,231	1.50	4,154
2000	95,723.34	83,758	83,550	12,173	2.50	4,869
2001	173,686.96	143,292	142,935	30,752	3.50	8,786
2002	94,356.55	73,126	72,944	21,413	4.50	4,758
2003	95,837.52	69,482	69,309	26,529	5.50	4,823
2004	32,484.97	21,927	21,872	10,613	6.50	1,633
2005	522.52	327	326	197	7.50	26
2007	4,181.56	2,195	2,190	1,992	9.50	210
2010	7,734.00	2,900	2,893	4,841	12.50	387
2011	12,031.56	3,910	3,900	8,132	13.50	602
2012	1,550.11	426	425	1,125	14.50	78
2014	565,919.21	99,036	98,790	467,129	16.50	28,311
2015	1,403,013.56	175,377	174,941	1,228,073	17.50	70,176
	3,048,596.64	1,219,242	1,216,208	1,832,389		142,003
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 12.9						4.66

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 391.11 OFFICE FURNITURE AND EQUIPMENT - 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						
2011	24,427.00	10,585	14,953	9,474	8.50	1,115
	24,427.00	10,585	14,953	9,474		1,115
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						8.5 4.56

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 391.12 OFFICE FURNITURE AND EQUIPMENT - INFORMATION 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.. 5-SQUARE						
NET SALVAGE PERCENT.. 0						
2013	299,109.66	269,199	218,970	80,140	0.50	80,140
2014	374,975.85	262,483	213,507	161,469	1.50	107,646
2015	844,125.38	422,063	343,312	500,813	2.50	200,325
	1,518,210.89	953,745	775,789	742,422		388,111
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 1.9						25.56

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 392 TRANSPORTATION EQUIPMENT - TRAILERS

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						
2004	70,904.01	63,814	46,737	24,167	1.50	16,111
2011	3,781.00	1,638	1,200	2,581	8.50	304
2012	14,849.79	5,445	3,987	10,863	9.50	1,143
2013	2,789.00	837	613	2,176	10.50	207
	92,323.80	71,734	52,537	39,787		17,765
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 2.2						19.24

COLUMBIA GAS OF PENNSYLVANIA, INC.

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.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
1998	13,435.25	13,099	13,436		1-	
	13,435.25	13,099	13,436		1-	
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						0.0 0.00

COLUMBIA GAS OF PENNSYLVANIA, INC.

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	413,416.69	405,148	412,051	1,366	0.50	1,366
1994	566,669.51	532,669	541,744	24,926	1.50	16,617
1995	162,417.47	146,176	148,666	13,751	2.50	5,500
1996	552,198.39	474,891	482,982	69,216	3.50	19,776
1997	1,161,874.46	952,737	968,969	192,905	4.50	42,868
1998	383,704.26	299,289	304,388	79,316	5.50	14,421
1999	191,341.50	141,593	144,005	47,336	6.50	7,282
2000	296,716.81	207,702	211,241	85,476	7.50	11,397
2001	186,888.81	123,347	125,449	61,440	8.50	7,228
2002	307,053.93	190,373	193,616	113,438	9.50	11,941
2003	266,861.99	154,780	157,417	109,445	10.50	10,423
2004	366,999.55	198,180	201,557	165,443	11.50	14,386
2005	79,725.36	39,863	40,542	39,183	12.50	3,135
2006	179,958.05	82,781	84,191	95,767	13.50	7,094
2007	847,845.86	356,095	362,162	485,684	14.50	33,495
2008	1,181,797.10	449,083	456,734	725,063	15.50	46,778
2009	278,442.30	94,670	96,283	182,159	16.50	11,040
2010	746,136.58	223,841	227,655	518,482	17.50	29,628
2011	626,616.50	162,920	165,696	460,920	18.50	24,915
2012	870,830.41	191,583	194,847	675,983	19.50	34,666
2013	784,168.63	141,150	143,555	640,614	20.50	31,249
2014	894,641.85	125,250	127,384	767,258	21.50	35,686
2015	1,799,274.66	179,927	182,993	1,616,282	22.50	71,835
2016	684,184.00	41,051	41,750	642,434	23.50	27,338
2017	1,200,001.00	24,000	24,409	1,175,592	24.50	47,983
	15,029,765.67	5,939,099	6,040,286	8,989,480		568,047
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						15.8 3.78

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 394.12 TOOLS, SHOP AND GARAGE EQUIPMENT - CNG FACILITIES

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 12-S1.5						
NET SALVAGE PERCENT.. 0						
1989	99,674.00	99,674	99,674			
1990	2,097.64	2,098	2,098			
1991	24,694.44	24,694	24,694			
1993	95,944.79	95,945	95,945			
1994	117,928.20	117,928	117,928			
1995	1,135,467.56	1,124,113	1,135,468			
1996	280,092.23	273,398	280,092			
1998	98,401.65	93,442	98,402			
1999	18,450.18	17,236	18,450			
2001	80,747.15	72,882	80,747			
	1,953,497.84	1,921,410	1,953,498			

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 0.0 0.00



COLUMBIA GAS OF PENNSYLVANIA, INC.

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						
1998	4,710.24	4,592	4,401	309	0.50	309
2000	2,990.39	2,617	2,508	482	2.50	193
2002	1,118.18	867	831	287	4.50	64
2011	19,084.33	6,202	5,945	13,139	13.50	973
	27,903.14	14,278	13,685	14,218		1,539
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						9.2 5.52

COLUMBIA GAS OF PENNSYLVANIA, INC.

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 12-L3						
NET SALVAGE PERCENT.. 0						
1990	14,666.07	14,640	14,666			
1991	77,918.78	77,225	77,919			
1992	7,619.70	7,481	7,620			
1993	2,619.06	2,547	2,619			
1994	49,419.28	47,615	49,419			
1995	102,911.30	98,177	102,911			
1997	46,192.45	42,991	46,192			
1999	176,977.59	160,094	174,850	2,128	1.95	1,091
2000	424,416.34	377,306	412,083	12,333	2.19	5,632
2001	23,340.60	20,372	22,250	1,091	2.40	455
2002	21,599.55	18,481	20,184	1,416	2.62	540
2003	458,375.61	384,165	419,575	38,801	2.80	13,858
2011	25,036.41	14,241	15,554	9,482	4.93	1,923
2014	4,400.00	1,432	1,564	2,836	7.25	391
	1,435,492.74	1,266,767	1,367,406	68,087		23,890
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						2.9 1.66

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 397.5 COMMUNICATION EQUIPMENT - TELEMETERING

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 17-R3						
NET SALVAGE PERCENT.. 0						
1991	226,631.93	223,414	221,129	5,503	0.38	5,503
1992	170,079.95	165,675	163,981	6,099	0.68	6,099
1995	11,194.73	10,529	10,421	774	1.42	545
1996	136,517.86	126,497	125,203	11,315	1.70	6,656
1997	72,647.48	66,269	65,591	7,056	1.97	3,582
1998	6,162.21	5,528	5,471	691	2.24	308
1999	94,035.80	82,460	81,617	12,419	2.60	4,777
2000	256,081.39	219,154	216,913	39,168	2.95	13,277
2001	115,190.03	95,608	94,630	20,560	3.38	6,083
2002	104,623.05	83,845	82,988	21,635	3.84	5,634
2004	2,975.42	2,181	2,159	816	4.92	166
2011	12,227.55	4,944	4,893	7,335	9.58	766
2012	1,384.24	481	476	908	10.32	88
2013	6,769.63	1,952	1,932	4,838	11.10	436
2015	7,917.33	1,305	1,292	6,625	12.67	523
2016	818,046.00	81,968	81,130	736,916	13.47	54,708
2017	1,200,001.00	41,040	40,620	1,159,381	14.10	82,226
	3,242,485.60	1,212,850	1,200,446	2,042,040		191,377

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 10.7 5.90

COLUMBIA GAS OF PENNSYLVANIA, INC.

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.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2003	7,484.08	7,235	6,743	741	0.50	741
2004	11,186.58	10,068	9,383	1,804	1.50	1,203
2005	23,458.02	19,548	18,218	5,240	2.50	2,096
2006	8,228.13	6,308	5,879	2,349	3.50	671
2007	136.82	96	89	48	4.50	11
2008	2,264.03	1,434	1,336	928	5.50	169
2009	11,311.50	6,410	5,974	5,338	6.50	821
2010	4,537.40	2,269	2,115	2,422	7.50	323
2011	63,192.60	27,383	25,521	37,672	8.50	4,432
2012	129,294.07	47,408	44,184	85,110	9.50	8,959
2013	14,421.00	4,326	4,032	10,389	10.50	989
2014	113,751.86	26,542	24,737	89,015	11.50	7,740
2015	381,868.01	63,646	59,317	322,551	12.50	25,804
2016	45,837.00	4,584	4,272	41,565	13.50	3,079
2017	50,004.00	1,667	1,554	48,450	14.50	3,341
	866,975.10	228,924	213,354	653,621		60,379
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						10.8 6.96

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**PART III. EXPERIENCED AND  
ESTIMATED NET SALVAGE**

COLUMBIA GAS OF PENNSYLVANIA, INC.

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED  
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
<b>2012 TRANSACTION YEAR</b>				
362.10		6,457.05		6,457.05-
374.40	15,595.34	260.16		260.16-
375.34	32,534.20	17,416.11		17,416.11-
375.60	22.40			
375.70	6,691.59	5,103.09		5,103.09-
376.00	6,717,810.62	886,996.12		886,996.12-
378.00	261,314.24	18,887.95		18,887.95-
380.00	5,021,027.74	2,192,533.99		2,192,533.99-
381.00	574,916.43	305.85	25,333.32	25,027.47
382.00	71,791.00			
383.00	12,740.78			
385.00	129,670.47	23,198.35		23,198.35-
387.40	18,518.39	55.60		55.60-
396.00	61,173.74			
	<b>12,923,806.94</b>	<b>3,151,214.27</b>	<b>25,333.32</b>	<b>3,125,880.95-</b>
<b>2013 TRANSACTION YEAR</b>				
351.20		608.46		608.46-
362.10		40,496.89		40,496.89-
374.20	1,583.70	57,633.75		57,633.75-
374.40	4,573.73	4,911.96		4,911.96-
375.34	21,986.97	22,427.70		22,427.70-
375.60		1,091.39		1,091.39-
376.00	7,496,191.99	691,743.41	2,051.59	689,691.82-
378.00	216,579.21	216,795.76		216,795.76-
380.00	5,734,991.74	1,750,826.78		1,750,826.78-
381.00	421,072.33	23.20	6,554.08	6,530.88
382.00	91,732.07			
383.00	9,962.93			
385.00	250,693.05	51,158.61		51,158.61-
387.00	4,694.90			
387.40	7,558.85	392.50		392.50-
392.00	118,202.85		44,482.18	44,482.18
396.00	349,409.40		104,669.48	104,669.48
397.50	23,451.88			
	<b>14,752,685.60</b>	<b>2,838,110.41</b>	<b>157,757.33</b>	<b>2,680,353.08-</b>

COLUMBIA GAS OF PENNSYLVANIA, INC.

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED  
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
<b>2014 TRANSACTION YEAR</b>				
362.10		461,689.98		461,689.98-
374.20	104.80	211,267.49-		211,267.49
374.40	24,414.93	21.91		21.91-
375.34	59,724.17	20,674.45		20,674.45-
376.00	7,888,751.50	1,281,289.43		1,281,289.43-
378.00	433,323.74	185,399.17		185,399.17-
379.10	12,676.85	91.84		91.84-
380.00	6,142,996.19	4,690,972.30		4,690,972.30-
381.00	393,244.36			
382.00	107,002.51			
383.00	8,132.91			
385.00	232,189.97	63,312.71		63,312.71-
387.40	27,680.85	933.57		933.57-
392.00	10,545.15			
397.50	28,765.62			
	<b>15,369,553.55</b>	<b>6,493,117.87</b>		<b>6,493,117.87-</b>
<b>2015 TRANSACTION YEAR</b>				
362.10		56,875.48		56,875.48-
374.40	15,740.42	2,936.76		2,936.76-
375.34	28,958.81	25,529.72		25,529.72-
375.70		22,140.00		22,140.00-
376.00	8,995,681.23	1,442,959.23	20,828.00	1,422,131.23-
378.00	306,189.60	122,225.11		122,225.11-
380.00	4,918,091.84	2,822,703.18		2,822,703.18-
381.00	370,041.70			
382.00	144,324.79			
383.00	13,105.34			
385.00	198,032.94	31,831.17		31,831.17-
387.40	26,673.61	1,060.39		1,060.39-
392.00	12,904.19			
394.00	758,805.48			
397.50	29,824.98	29,402.56		29,402.56-
	<b>15,818,374.93</b>	<b>4,557,663.60</b>	<b>20,828.00</b>	<b>4,536,835.60-</b>

COLUMBIA GAS OF PENNSYLVANIA, INC.

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				
362.10		1,303,742.00		1,303,742.00-
374.40	22,249.00	2,893.00		2,893.00-
375.34	35,601.00	23,141.00		23,141.00-
375.70	92,029.00	54,297.00		54,297.00-
376.00	14,653,848.00	2,198,077.00		2,198,077.00-
378.00	200,249.00	78,097.00		78,097.00-
380.00	3,493,250.00	2,095,950.00		2,095,950.00-
381.00	111,250.00		1,112.00	1,112.00
382.00	111,252.00			
383.00	53,399.00			
385.00	13,350.00	2,670.00		2,670.00-
	18,786,477.00	5,758,867.00	1,112.00	5,757,755.00-
<b>TOTAL</b>	<b>77,650,898.02</b>	<b>22,798,973.15</b>	<b>205,030.65</b>	<b>22,593,942.50-</b>



**COLUMBIA GAS OF PENNSYLVANIA, INC.**

**53.53 I. VALUATION**

**A. ALL UTILITIES**

5. Provide a comparison of respondent's calculated depreciation reserve vs. book reserve by account at the end of the test year.

Response: See Pages 2 through 7 for the comparison of the calculated depreciation reserve vs. book reserve as of November 30, 2016 and as of December 31, 2017.

COLUMBIA GAS OF PENNSYLVANIA, INC.

COMPARISON OF CALCULATED ACCRUED DEPRECIATION  
AND BOOK RESERVE AS OF NOVEMBER 30, 2016

<u>DEPRECIABLE GROUP</u>		<u>CALCULATED ACCRUED DEPRECIATION</u>	<u>BOOK RESERVE</u>
(1)		(2)	(3)
		\$	\$
<b>DEPRECIABLE PLANT</b>			
<b>UNDERGROUND STORAGE PLANT</b>			
350.2	RIGHTS-OF-WAY	1,619	1,931
351	COMPRESSOR STATION STRUCTURES	1,316,295	1,067,831
WELLS			
352.01	CONSTRUCTION	671,174	799,118
352.02	EQUIPMENT	143,913	168,680
	<i>TOTAL ACCOUNT 352</i>	<u>815,087</u>	<u>967,798</u>
352.1	STORAGE LEASEHOLDS AND RIGHTS	174,658	206,932
353	LINES	337,347	405,288
354	COMPRESSOR STATION EQUIPMENT	571,720	651,798
355	MEASURING AND REGULATING EQUIPMENT	<u>102,054</u>	<u>123,010</u>
	<b>TOTAL UNDERGROUND STORAGE PLANT</b>	<b>3,318,780</b>	<b>3,424,588</b>
<b>DISTRIBUTION PLANT</b>			
LAND AND LAND RIGHTS			
374.4	LAND RIGHTS	709,690	657,837
374.5	RIGHTS-OF-WAY	1,581,249	1,601,503
	<i>TOTAL ACCOUNT 374</i>	<u>2,290,939</u>	<u>2,259,340</u>
STRUCTURES AND IMPROVEMENTS			
375.34	MEASURING AND REGULATING	1,316,737	1,327,973
375.6	INDUSTRIAL MEASURING AND REGULATING	63,112	73,641
375.7	OTHER DISTRIBUTION SYSTEMS		
	DISTRIBUTION SYSTEM STRUCTURES	1,476,667	1,652,340
	OTHER BUILDINGS	603,714	679,824
	<i>TOTAL ACCOUNT 375.70</i>	<u>2,080,381</u>	<u>2,332,164</u>
375.8	COMMUNICATION STRUCTURES	<u>5,576</u>	<u>6,508</u>
	<i>TOTAL ACCOUNT 375</i>	<b>3,465,806</b>	<b>3,740,286</b>
376	MAINS		
	CAST IRON	423,001	366,588
	BARE STEEL	52,028,600	45,089,901
	OTHER	172,019,396	149,078,343
	<i>TOTAL ACCOUNT 376</i>	<u>224,470,997</u>	<u>194,534,832</u>

COLUMBIA GAS OF PENNSYLVANIA, INC.

COMPARISON OF CALCULATED ACCRUED DEPRECIATION  
AND BOOK RESERVE AS OF NOVEMBER 30, 2016

<u>DEPRECIABLE GROUP</u>		<u>CALCULATED ACCRUED DEPRECIATION</u>	<u>BOOK RESERVE</u>
(1)		(2)	(3)
		\$	\$
378	MEASURING AND REGULATING EQUIPMENT - GENERAL	10,435,332	10,020,157
379.1	MEASURING AND REGULATING EQUIPMENT - CITY GATE	99,929	93,180
380	SERVICES		
	BARE STEEL	704,425	723,963
	OTHER	<u>107,822,020</u>	<u>110,812,604</u>
	TOTAL ACCOUNT 380	108,526,445	111,536,567
381	METERS	15,464,626	15,673,710
381.1	METERS - AMR	8,923,227	8,582,181
382	METER INSTALLATIONS	11,142,895	11,909,425
383	HOUSE REGULATORS	3,233,556	3,567,106
384	HOUSE REGULATOR INSTALLATIONS	2,636,255	2,972,034
385	INDUSTRIAL MEASURING AND REGULATING EQUIPMENT - OTHER THAN METERS	3,135,456	2,981,725
	OTHER EQUIPMENT		
387	GENERAL	73,227	75,343
387.4	CUSTOMER INFORMATION SERVICES	978,110	839,236
387.5	GPS EQUIPMENT	<u>563,979</u>	<u>363,074</u>
	TOTAL ACCOUNT 387	1,615,316	1,277,653
	<b>TOTAL DISTRIBUTION PLANT</b>	<b>395,440,779</b>	<b>369,148,196</b>
<b>GENERAL PLANT</b>			
390.1	STRUCTURES AND IMPROVEMENTS - COMMUNICATIONS	81,529	85,422
	OFFICE FURNITURE AND EQUIPMENT		
391.1	FURNITURE	1,771,715	1,791,600
391.11	EQUIPMENT	8,821	13,746
391.12	INFORMATION SYSTEMS	<u>2,523,578</u>	<u>2,520,633</u>
	TOTAL ACCOUNT 391	4,304,114	4,325,979
392	TRANSPORTATION EQUIPMENT - TRAILERS	70,071	53,268
393	STORES EQUIPMENT	15,584	16,675
	TOOLS, SHOP AND GARAGE EQUIPMENT		
394	EQUIPMENT	5,656,732	5,797,220
394.12	CNG FACILITIES	<u>1,894,851</u>	<u>1,953,286</u>
	TOTAL ACCOUNT 394	7,551,583	7,750,506
395	LABORATORY EQUIPMENT	35,268	35,023
396	POWER OPERATED EQUIPMENT	1,241,441	1,367,642

COLUMBIA GAS OF PENNSYLVANIA, INC.

COMPARISON OF CALCULATED ACCRUED DEPRECIATION  
AND BOOK RESERVE AS OF NOVEMBER 30, 2016

<u>DEPRECIABLE GROUP</u>		<u>CALCULATED ACCRUED DEPRECIATION</u>	<u>BOOK RESERVE</u>
(1)		(2)	(3)
		\$	\$
	COMMUNICATION EQUIPMENT		
397.1	TELEPHONE	168,831	163,625
397.5	TELEMETERING	1,086,509	884,202
	<i>TOTAL ACCOUNT 397</i>	<u>1,255,340</u>	<u>1,047,827</u>
398	MISCELLANEOUS EQUIPMENT	<u>215,609</u>	<u>199,269</u>
	<b>TOTAL GENERAL PLANT</b>	<b><u>14,770,539</u></b>	<b><u>14,881,611</u></b>
	<b>SUBTOTAL DEPRECIABLE PLANT</b>	<b>413,530,098</b>	<b>387,454,395</b>
<b>AMORTIZABLE PLANT</b>			
303	MISCELLANEOUS INTANGIBLE PLANT	8,753,916	8,753,916
362.1	ENVIRONMENTAL REMEDIATION	(1,686,454)	(1,686,454)
374.2	LAND, OTHER DISTRIBUTION SYSTEMS	179,478	179,478
375.71	STRUCTURES AND IMPROVEMENTS - LEASED	<u>740,882</u>	<u>740,882</u>
	<b>SUBTOTAL AMORTIZABLE PLANT</b>	<b><u>7,987,822</u></b>	<b><u>7,987,822</u></b>
	<b>TOTAL GAS PLANT</b>	<b><u>421,517,920</u></b>	<b><u>395,442,217</u></b>

COLUMBIA GAS OF PENNSYLVANIA, INC.

COMPARISON OF CALCULATED ACCRUED DEPRECIATION  
AND BOOK RESERVE AS OF DECEMBER 31, 2017

<u>DEPRECIABLE GROUP</u>		<u>CALCULATED ACCRUED DEPRECIATION</u>	<u>BOOK RESERVE</u>
(1)		(2)	(3)
		\$	\$
<b>DEPRECIABLE PLANT</b>			
<b>UNDERGROUND STORAGE PLANT</b>			
350.2	RIGHTS-OF-WAY	1,659	1,931
351	COMPRESSOR STATION STRUCTURES	1,552,486	1,339,667
	<b>WELLS</b>		
352.01	CONSTRUCTION	687,287	799,118
352.02	EQUIPMENT	146,481	168,680
	<i>TOTAL ACCOUNT 352</i>	<u>833,768</u>	<u>967,798</u>
352.1	STORAGE LEASEHOLDS AND RIGHTS	178,722	206,932
353	LINES	345,121	405,288
354	COMPRESSOR STATION EQUIPMENT	612,532	680,325
355	MEASURING AND REGULATING EQUIPMENT	104,340	123,010
	<b>TOTAL UNDERGROUND STORAGE PLANT</b>	<b>3,628,628</b>	<b>3,724,951</b>
<b>DISTRIBUTION PLANT</b>			
	<b>LAND AND LAND RIGHTS</b>		
374.4	LAND RIGHTS	742,197	683,587
374.5	RIGHTS-OF-WAY	1,622,826	1,647,478
	<i>TOTAL ACCOUNT 374</i>	<u>2,365,023</u>	<u>2,331,065</u>
	<b>STRUCTURES AND IMPROVEMENTS</b>		
375.34	MEASURING AND REGULATING	1,396,233	1,406,360
375.6	INDUSTRIAL MEASURING AND REGULATING	63,940	74,808
375.7	OTHER DISTRIBUTION SYSTEMS		
	DISTRIBUTION SYSTEM STRUCTURES	1,665,824	1,842,427
	OTHER BUILDINGS	670,569	745,406
	<i>TOTAL ACCOUNT 375.70</i>	<u>2,336,393</u>	<u>2,587,833</u>
375.8	COMMUNICATION STRUCTURES	5,912	6,866
	<i>TOTAL ACCOUNT 375</i>	<b>3,802,478</b>	<b>4,075,867</b>
376	<b>MAINS</b>		
	CAST IRON	371,139	316,848
	BARE STEEL	45,685,730	39,002,735
	OTHER	192,897,642	164,680,211
	<i>TOTAL ACCOUNT 376</i>	<u>238,954,511</u>	<u>203,999,794</u>

COLUMBIA GAS OF PENNSYLVANIA, INC.

COMPARISON OF CALCULATED ACCRUED DEPRECIATION  
AND BOOK RESERVE AS OF DECEMBER 31, 2017

<u>DEPRECIABLE GROUP</u>		<u>CALCULATED ACCRUED DEPRECIATION</u>	<u>BOOK RESERVE</u>
(1)		(2)	(3)
		\$	\$
378	MEASURING AND REGULATING EQUIPMENT - GENERAL	11,515,427	11,263,278
379.1	MEASURING AND REGULATING EQUIPMENT - CITY GATE	102,421	98,046
380	SERVICES		
	BARE STEEL	603,130	623,394
	OTHER	<u>117,699,700</u>	<u>121,654,220</u>
	<b>TOTAL ACCOUNT 380</b>	<b>118,302,830</b>	<b>122,277,614</b>
381	METERS	16,148,709	16,508,949
381.1	METERS - AMR	10,601,875	10,448,842
382	METER INSTALLATIONS	11,783,393	12,548,434
383	HOUSE REGULATORS	3,510,154	3,829,549
384	HOUSE REGULATOR INSTALLATIONS	2,714,342	3,044,466
385	INDUSTRIAL MEASURING AND REGULATING EQUIPMENT - OTHER THAN METERS	3,286,619	3,265,874
	OTHER EQUIPMENT		
387	GENERAL	76,067	79,896
387.4	CUSTOMER INFORMATION SERVICES	1,167,078	1,071,728
387.5	GPS EQUIPMENT	<u>971,286</u>	<u>811,351</u>
	<b>TOTAL ACCOUNT 387</b>	<b>2,214,431</b>	<b>1,962,975</b>
	<b>TOTAL DISTRIBUTION PLANT</b>	<b>425,302,213</b>	<b>395,654,753</b>
<b>GENERAL PLANT</b>			
390.1	STRUCTURES AND IMPROVEMENTS - COMMUNICATIONS	83,609	88,154
	OFFICE FURNITURE AND EQUIPMENT		
391.1	FURNITURE	1,219,242	1,216,208
391.11	EQUIPMENT	10,585	14,953
391.12	INFORMATION SYSTEMS	<u>953,745</u>	<u>775,789</u>
	<b>TOTAL ACCOUNT 391</b>	<b>2,183,572</b>	<b>2,006,950</b>
392	TRANSPORTATION EQUIPMENT - TRAILERS	71,734	52,537
393	STORES EQUIPMENT	13,099	13,436
	TOOLS, SHOP AND GARAGE EQUIPMENT		
394	EQUIPMENT	5,939,099	6,040,286
394.12	CNG FACILITIES	<u>1,921,410</u>	<u>1,953,498</u>
	<b>TOTAL ACCOUNT 394</b>	<b>7,860,509</b>	<b>7,993,784</b>
395	LABORATORY EQUIPMENT	14,278	13,685
396	POWER OPERATED EQUIPMENT	1,266,767	1,367,406

COLUMBIA GAS OF PENNSYLVANIA, INC.

COMPARISON OF CALCULATED ACCRUED DEPRECIATION  
AND BOOK RESERVE AS OF DECEMBER 31, 2017

<u>DEPRECIABLE GROUP</u>		<u>CALCULATED ACCRUED DEPRECIATION</u>	<u>BOOK RESERVE</u>
(1)		(2)	(3)
		\$	\$
397.5	COMMUNICATION EQUIPMENT - TELEMETERING	1,212,850	1,200,446
398	MISCELLANEOUS EQUIPMENT	<u>228,924</u>	<u>213,354</u>
	<b>TOTAL GENERAL PLANT</b>	<b><u>12,935,342</u></b>	<b><u>12,949,752</u></b>
	<b>SUBTOTAL DEPRECIABLE PLANT</b>	<b>441,866,183</b>	<b>412,329,456</b>
<b>AMORTIZABLE PLANT</b>			
303	MISCELLANEOUS INTANGIBLE PLANT	9,799,828	9,799,828
362.1	ENVIRONMENTAL REMEDIATION	(2,266,471)	(2,266,471)
374.2	LAND, OTHER DISTRIBUTION SYSTEMS	146,190	146,190
375.71	STRUCTURES AND IMPROVEMENTS - LEASED	<u>1,080,296</u>	<u>1,080,296</u>
	<b>SUBTOTAL AMORTIZABLE PLANT</b>	<b>8,759,843</b>	<b>8,759,843</b>
	<b>TOTAL GAS PLANT</b>	<b><u>450,626,026</u></b>	<b><u>421,089,299</u></b>

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**53.53 I. VALUATION**  
**A. ALL UTILITIES**

6. Supply a schedule by account and depreciation group showing the survivor curve and annual accrual rate estimated to be appropriate:
- a. For the purposes of this filing.
  - b. For the purposes of the most recent rate increase filing prior to the current proceedings.
    - (i) Supply a comprehensive statement of any changes made in method of depreciation and in the selection of average services lives and dispersion.

**Response:**

- a. Please refer to pages V-4 through V-6 of Columbia's Future Test Year depreciation study included in Exhibit No. 109, Schedule No.1.  
  
Please refer to pages I-3 through I-5 of Columbia's Fully Forecasted Rate Year depreciation study included in Exhibit No. 9, Schedule No. 1, Attachment B.
- b. Please refer to Pages 2 through 7 of this response.
  - (i) The depreciation methods and procedures used in this filing are the same as those used in previous filings. Explanations of the depreciation methods and procedures are presented in Exhibit No. 109, Schedule No. 1, Attachment A.  
  
The estimated survivor curves used in this filing are equivalent to those used in the most recent Service Life Study, filed as of August 31, 2012.



COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 1. ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF NOVEMBER 30, 2016

	(1)	(2)	(3)	(4)	(5)	(6)	(7)-(6)(3)	(8)-(5)(6)
DEPRECIABLE PLANT	DEPRECIABLE GROUP	SURVIVOR CURVE	ORIGINAL COST AS OF NOVEMBER 30, 2016	BOOK RESERVE	FUTURE BOOK ACCRUAL	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
<b>UNDERGROUND STORAGE PLANT</b>								
350.2	RIGHTS-OF-WAY	SQUARE	1,932.08	1,931	1	0	-	-
351	COMPRESSOR STATION STRUCTURES	65-R2.5	3,133,154.50	861,264	2,271,890	121,392	3.87	16.7
<b>WELLS</b>								
352.01	CONSTRUCTION	SQUARE	799,133.73	799,118	16	1	0.00	16.0
352.02	EQUIPMENT	45-S2.5	189,879.67	189,680	0	0	-	-
	TOTAL ACCOUNT 352		987,813.40	987,798	16	1	-	-
352.1	STORAGE LEASEHOLDS AND RIGHTS	SQUARE	206,940.78	206,932	9	0	0.00	20.6
353	LINE	50-S1.5	405,287.78	405,298	0	0	-	-
354	COMPRESSOR STATION EQUIPMENT	50-R2.5	1,097,851.86	569,716	528,136	29,778	2.71	17.7
355	MEASURING AND REGULATING EQUIPMENT	37-R1.5	123,010.01	123,010	0	0	-	-
	TOTAL UNDERGROUND STORAGE PLANT		6,936,990.21	3,136,939	2,800,062	181,171	2.55	-
<b>DISTRIBUTION PLANT</b>								
<b>LAND AND LAND RIGHTS</b>								
374.4	LAND RIGHTS	65-R3	2,309,556.32	651,055	1,658,501	39,419	1.71	42.1
374.5	RIGHTS-OF-WAY	75-S4	3,233,106.76	1,555,852	1,677,455	42,583	1.32	39.4
	TOTAL ACCOUNT 374		5,542,663.08	2,206,707	3,335,856	82,002	1.48	-
<b>STRUCTURES AND IMPROVEMENTS</b>								
375.34	MEASURING AND REGULATING	60-R1.5	3,630,617.62	824,030	2,806,588	80,960	2.23	34.7
375.6	INDUSTRIAL MEASURING AND REGULATING	50-R1.5	87,669.84	72,639	15,031	911	1.04	16.5
375.7	OTHER DISTRIBUTION SYSTEMS	90-R1	5,007,632.59	938,647	4,069,185	290,174	5.79	14.0
	DISTRIBUTION SYSTEM STRUCTURES	33-S1	2,883,205.78	887,124	2,006,082	102,921	3.56	19.5
	OTHER BUILDINGS		7,901,038.35	1,825,771	6,075,267	393,095	4.98	15.5
	TOTAL ACCOUNT 375.70		16,515.17	6,177	10,338	335	2.03	30.9
375.8	COMMUNICATION STRUCTURES		11,635,840.98	2,728,617	8,907,224	475,301	4.08	-
	TOTAL ACCOUNT 375							
<b>MAINS</b>								
376	CAST IRON	72-R1.5	519,938.43	397,531	122,408	14,808	2.85	8.3
	BARE STEEL	72-R1.5	63,922,677.80	48,055,982	17,866,276	1,902,560	2.98	9.4
	OTHER	72-R1.5	1,036,113,894.22	134,519,820	903,594,074	20,587,782	1.98	43.9
	TOTAL ACCOUNT 376		1,102,566,101.45	180,973,343	921,582,758	22,515,178	2.04	-

COLUMBIA GAS OF PENNSYLVANIA, INC.  
 TABLE 1. ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK RESERVE AND  
 CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF NOVEMBER 30, 2016

	DEPRECIABLE GROUP (1)	SURVIVOR CURVE (2)	ORIGINAL COST AS OF NOVEMBER 30, 2016 (3)	BOOK RESERVE (4)	FUTURE BOOK ACCRUAL (5)	CALCULATED		COMPOSITE REMAINING LIFE (8)=(5)/(6)
						ANNUAL AMOUNT (6)	ACCRAUAL RATE (7)=(6)/(3)	
378	MEASURING AND REGULATING EQUIPMENT - GENERAL	45-R0.5	38,027,385.03	8,503,313	30,524,072	1,300,124	3.33	23.5
378.1	MEASURING AND REGULATING EQUIPMENT - CITY GATE	35-S2.5	141,117.10	89,069	52,048	4,843	3.29	11.2
380	SERVICES							
	BARE STEEL	50-R0.5	867,918.41	744,647	123,272	15,590	1.80	7.9
	OTHER	50-R0.5	419,558,828.39	102,911,461	316,645,168	12,079,478	2.88	26.2
	TOTAL ACCOUNT 380		420,424,548.80	103,658,108	316,768,440	12,095,068	2.88	
381	METERS							
381.1	METERS - AMR	43-S1.5	35,175,284.44	15,173,270	20,002,014	885,426	2.46	23.1
382	METER INSTALLATIONS	15-S2.5	23,509,038.80	6,817,382	16,691,657	1,782,970	7.50	9.5
383	HOUSE REGULATOR	55-R2.5	35,334,789.60	11,320,688	24,014,102	887,434	1.95	34.9
384	HOUSE REGULATOR INSTALLATIONS	40-S2	10,998,752.48	3,318,441	7,680,311	282,400	2.57	27.2
385	INDUSTRIAL MEASURING AND REGULATING EQUIPMENT - OTHER THAN METERS	35-S3	3,864,772.07	2,894,820	959,952	68,593	1.77	14.0
		30-R0.5	8,856,405.61	3,015,332	3,841,074	266,819	3.89	14.4
387	OTHER EQUIPMENT							
387.4	GENERAL	30-R0.5	133,851.08	68,826	65,025	5,011	3.74	13.0
	CUSTOMER INFORMATION SERVICES	25-R2.5	3,113,728.21	689,826	2,424,102	148,878	4.77	16.3
	TOTAL ACCOUNT 387		3,247,579.27	758,452	2,489,127	153,890	4.73	
	TOTAL DISTRIBUTION PLANT		1,888,314,278.71	341,465,542	1,368,848,735	40,659,638	2.39	
	GENERAL PLANT							
390.1	STRUCTURES AND IMPROVEMENTS - COMMUNICATIONS	40-R2.5	48,821.42	48,089	1,732	118	0.24	14.7
391.1	OFFICE FURNITURE AND EQUIPMENT							
391.11	FURNITURE	20-SQ	2,056,730.04	1,742,734	313,998	39,906	1.94	7.8
391.12	EQUIPMENT	15-SQ	24,427.00	11,382	13,045	1,233	5.05	10.6
	INFORMATION SYSTEMS	5-SQ	2,550,893.35	1,900,062	650,831	372,052	14.59	1.7
	TOTAL ACCOUNT 391		4,632,050.39	3,654,178	977,872	413,191	8.92	
392	TRANSPORTATION EQUIPMENT - TRAILERS	15-SQ	97,532.51	53,871	43,662	9,323	9.56	4.7
393	STORES EQUIPMENT	20-SQ	16,874.52	16,436	239	92	0.55	2.6
394	TOOLS, SHOP AND GARAGE EQUIPMENT							
394.12	EQUIPMENT	25-SQ	12,685,829.34	5,473,950	7,211,871	468,833	3.88	15.4
394.5	CNG FACILITIES	12-S1.5	1,953,497.84	1,953,286	212	90	0.00	2.4
	GPS	10-SQ	2,195,621.00	109,781	2,085,840	227,410	10.36	9.2
	TOTAL ACCOUNT 394		16,834,948.18	7,537,025	9,297,823	684,333	4.12	
395	LABORATORY EQUIPMENT	20-SQ	50,660.92	31,717	18,944	3,080	6.08	6.2
396	POWER OPERATED EQUIPMENT	12-L3	1,435,482.74	1,367,201	68,282	19,928	1.39	3.4

COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 1. ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF NOVEMBER 30, 2015

	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)(3)	(8)=(5)(6)
	DEPRECIABLE GROUP	SURVIVOR CURVE	ORIGINAL COST AS OF NOVEMBER 30, 2015	BOOK RESERVE	FUTURE BOOK ACCRUAL	ANNUAL ACCRUAL AMOUNT	RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)(3)	(8)=(5)(6)
397.1	COMMUNICATION EQUIPMENT							
397.24	TELEPHONE	10-SQ	738,852.74	344,072	394,781	89,587	9.42	5.7
397.5	RADIO	15-SQ	2,444,474.22	1,729,110	715,384	58,099	2.38	12.3
	TELEMETERING	17-R3	1,070,029.25	676,536	393,493	52,082	4.87	7.6
	TOTAL ACCOUNT 397		4,253,356.21	2,749,718	1,503,638	179,748	4.23	
398	MISCELLANEOUS EQUIPMENT	15-SQ	633,468.80	169,968	463,501	43,992	6.94	10.5
	TOTAL GENERAL PLANT		28,004,005.69	16,628,203	12,376,803	1,363,803	4.87	
	SUBTOTAL DEPRECIABLE PLANT		1,732,264,274.61	380,229,884	1,372,024,690	42,074,612	2.43	
	AMORTIZABLE PLANT							
303	MISCELLANEOUS INTANGIBLE PLANT							
305	STRUCTURES AND IMPROVEMENTS		22,334,949.03	7,112,928	15,222,021	3,387,986	**	
382	GAS HOLDERS			(4,563)				
382.1	ENVIRONMENTAL REMEDIATION			(1,809)				
374.2	LAND, OTHER DISTRIBUTION SYSTEMS		479,275.40	(956,223)				
375.71	STRUCTURES AND IMPROVEMENTS - LEASED		1,125,910.63	222,752	26,961	26,961	**	
389.2	LAND AND LAND RIGHTS - LAND RIGHTS			1,098,950				
	SUBTOTAL AMORTIZABLE PLANT		23,940,135.06	7,472,264	16,248,982	3,414,957		
	NONDEPRECIABLE PLANT		172,413.08					
	TOTAL GAS PLANT		1,758,366,822.75	387,701,938	1,387,273,572	45,489,569		

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

\*\* Accrual rate based on individual asset amortization.

COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 1. ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF DECEMBER 31, 2016

DEPRECIABLE GROUP (1)	SURVIVOR CURVE (2)	ORIGINAL COST AS OF DECEMBER 31, 2016 (3)	BOOK RESERVE (4)	FUTURE BOOK ACCRUAL (6)	CALCULATED ANNUAL ACCRUAL AMOUNT (6)	CALCULATED ANNUAL ACCRUAL RATE (7)=(6)/(3)	COMPOSITE REMAINING LIFE (8)=(5)/(6)
<b>DEPRECIABLE PLANT</b>							
<b>UNDERGROUND STORAGE PLANT</b>							
350.2	RIGHTS-OF-WAY		1,931	1	0	-	-
351	COMPRESSOR STATION STRUCTURES	3,133,154.50	982,754	2,140,400	120,418	3.84	17.8
	<b>WELLS</b>						
352.01	CONSTRUCTION	798,133.73	799,118	16	1	0.00	16.0
352.02	EQUIPMENT	168,878.67	168,880	0	0	-	-
	TOTAL ACCOUNT 352	967,012.40	967,998	16	1	-	-
352.1	STORAGE LEASEHOLDS AND RIGHTS	206,940.78	206,932	9	0	0.00	20.6
353	LINE	405,287.78	405,288	0	0	-	-
354	COMPRESSOR STATION EQUIPMENT	1,326,851.66	574,335	752,517	44,433	3.35	16.9
355	MEASURING AND REGULATING EQUIPMENT	123,010.01	123,010	0	0	-	-
	<b>TOTAL UNDERGROUND STORAGE PLANT</b>	<b>6,184,990.21</b>	<b>3,272,048</b>	<b>2,892,943</b>	<b>164,852</b>	<b>2.67</b>	
<b>DISTRIBUTION PLANT</b>							
<b>LAND AND LAND RIGHTS</b>							
374.4	LAND RIGHTS	2,401,856.32	881,985	1,719,891	40,985	1.71	42.0
374.5	RIGHTS-OF-WAY	3,233,106.76	1,801,901	1,631,206	42,159	1.30	38.7
	TOTAL ACCOUNT 374	5,634,963.08	2,283,886	3,351,097	83,124	1.48	
<b>STRUCTURES AND IMPROVEMENTS</b>							
375.34	MEASURING AND REGULATING	3,865,617.92	883,045	2,982,573	85,582	2.21	34.9
375.6	INDUSTRIAL MEASURING AND REGULATING	87,669.04	73,869	13,801	850	0.97	16.2
375.7	OTHER DISTRIBUTION SYSTEMS	6,519,307.59	1,155,979	5,363,328	345,323	5.30	15.5
	DISTRIBUTION SYSTEM STRUCTURES	2,876,730.76	875,722	2,001,009	104,982	3.65	19.1
	OTHER BUILDINGS	9,396,038.35	2,031,701	7,364,337	450,305	4.79	16.4
	TOTAL ACCOUNT 375.70						
375.8	COMMUNICATION STRUCTURES	16,515.17	6,540	9,975	331	2.00	30.1
	TOTAL ACCOUNT 375	13,385,840.98	2,995,155	10,370,886	537,048	4.02	
376	<b>MAINS</b>						
	CAST IRON	454,390.43	342,363	112,027	14,809	3.26	7.6
	BARE STEEL	55,064,152.80	39,408,488	15,655,665	1,653,074	3.37	8.4
	OTHER	1,192,195,558.22	145,851,545	1,046,544,013	23,804,762	2.00	44.0
	TOTAL ACCOUNT 376	1,247,714,101.45	185,402,396	1,062,311,705	25,672,845	2.06	

COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 1. ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF DECEMBER 31, 2016

	DEPRECIABLE GROUP (1)	SURVIVOR CURVE (2)	ORIGINAL COST AS OF DECEMBER 31, 2016 (3)	BOOK RESERVE (4)	FUTURE BOOK ACCRUAL (5)	CALCULATED ANNUAL ACCRUAL AMOUNT (6)	CALCULATED RATE (7)=(6)/(3)	COMPOSITE REMAINING LIFE (8)=(5)/(6)
378	MEASURING AND REGULATING EQUIPMENT - GENERAL	45-R0.5	40,144,485.03	9,897,811	30,246,674	1,247,179	3.11	24.3
379.1	MEASURING AND REGULATING EQUIPMENT - CITY GATE	35-S2.5	141,117.10	94,150	46,967	4,384	3.11	10.7
380	SERVICES							
	BARE STEEL	50-R0.5	773,989.41	674,065	99,904	13,670	1.77	7.3
	OTHER	50-R0.5	454,253,179.39	112,383,099	341,870,080	12,910,907	2.84	26.5
	TOTAL ACCOUNT 380		455,027,148.80	113,057,164	341,969,984	12,924,577	2.84	
381	METERS							
381.1	METERS - AMR	43-S1.5	36,182,184.44	15,981,882	20,200,502	877,483	2.43	23.0
382	METER INSTALLATIONS	15-S2.5	23,760,038.80	8,698,973	15,061,066	1,748,019	7.36	8.6
383	HOUSE REGULATORS	55-R2.5	36,486,289.60	11,922,861	24,563,429	708,729	1.94	34.7
384	HOUSE REGULATOR INSTALLATIONS	40-S2	11,597,052.48	3,551,101	8,045,951	300,136	2.59	26.8
385	INDUSTRIAL MEASURING AND REGULATING EQUIPMENT - OTHER THAN METERS	35-S3	3,864,772.07	2,978,927	885,845	66,436	1.72	13.3
		30-R0.5	6,994,005.61	3,322,200	3,671,806	246,457	3.52	14.9
387	OTHER EQUIPMENT							
387.4	GENERAL CUSTOMER INFORMATION SERVICES	30-R0.5	133,851.08	80,135	53,716	3,235	2.42	16.6
	TOTAL ACCOUNT 387	25-R2.5	3,113,728.21	850,988	2,262,742	141,588	4.55	18.0
			3,247,578.27	931,121	2,316,458	144,833	4.46	
	TOTAL DISTRIBUTION PLANT		1,884,189,678.71	361,117,407	1,523,042,170	44,561,062	2.37	
	GENERAL PLANT							
390.1	STRUCTURES AND IMPROVEMENTS - COMMUNICATIONS	40-R2.5	49,821.42	48,219	1,602	113	0.23	14.2
391.1	OFFICE FURNITURE AND EQUIPMENT							
391.11	FURNITURE	20-SQ	1,859,847.84	1,422,297	437,551	49,500	2.66	8.8
391.12	EQUIPMENT	15-SQ	24,427.00	12,718	11,709	1,233	5.05	9.5
	INFORMATION SYSTEMS	5-SQ	1,075,009.68	421,205	653,805	259,998	24.09	2.5
	TOTAL ACCOUNT 391		2,959,284.50	1,856,220	1,103,065	308,731	10.47	
392	TRANSPORTATION EQUIPMENT - TRAILERS	15-SQ	92,323.80	47,470	44,854	12,854	13.92	3.5
393	STORES EQUIPMENT	20-SQ	14,374.80	14,235	140	93	0.65	1.5
394	TOOLS, SHOP AND GARAGE EQUIPMENT							
394.12	EQUIPMENT	25-SQ	12,773,968.11	5,808,356	7,165,610	482,650	3.78	14.8
394.5	CNG FACILITIES	12-S1.5	1,953,497.84	1,953,286	212	104	0.01	2.0
	GPS	10-SQ	3,426,839.00	388,538	3,038,301	356,295	10.40	8.5
	TOTAL ACCOUNT 394		18,154,302.95	7,950,180	10,204,123	639,049	4.62	
395	LABORATORY EQUIPMENT	20-SQ	38,715.09	21,073	15,642	1,854	5.05	8.4
396	POWER OPERATED EQUIPMENT	12-L3	1,435,492.74	1,355,630	79,863	26,331	1.83	3.0

COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 1. ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF DECEMBER 31, 2016

	DEPRECIABLE GROUP (1)	SURVIVOR CURVE (2)	ORIGINAL COST AS OF DECEMBER 31, 2016 (3)	BOOK RESERVE (4)	FUTURE BOOK ACCRUAL (5)	CALCULATED ANNUAL ACCRUAL AMOUNT (6)	CALCULATED RATE (7)=(6)/(3)	COMPOSITE REMAINING LIFE (8)=(5)/(6)
397.1	COMMUNICATION EQUIPMENT							
397.24	TELEPHONE	10-SQ	798,153.00	67,903	731,250	84,357	10.56	8.7
397.5	RADIO	15-SQ	1,469,532.41	57,008	1,412,524	117,984	8.03	12.0
	TELEMETERING	17-R3	1,333,806.25	735,828	597,978	66,315	4.97	9.0
	TOTAL ACCOUNT 397		3,602,491.66	860,739	2,741,752	268,656	7.46	
398	MISCELLANEOUS EQUIPMENT	15-SQ	1,059,483.98	193,810	864,674	74,092	7.00	11.7
	TOTAL GENERAL PLANT		27,403,290.74	12,347,776	15,055,515	1,532,773	5.59	
	SUBTOTAL DEPRECIABLE PLANT		1,917,727,859.66	376,737,231	1,540,990,628	46,258,677	2.41	
	AMORTIZABLE PLANT							
303	MISCELLANEOUS INTANGIBLE PLANT							
305	STRUCTURES AND IMPROVEMENTS		25,523,894.03	9,443,231	16,080,663	3,857,309	**	
362	GAS HOLDERS			(4,583)				
362.1	ENVIRONMENTAL REMEDIATION			(1,609)				
374.2	LAND, OTHER DISTRIBUTION SYSTEMS		479,275.40	(797,682)				
375.71	STRUCTURES AND IMPROVEMENTS - LEASED		1,125,910.63	235,240				
389.2	LAND AND LAND RIGHTS - LAND RIGHTS			1,125,911				
	SUBTOTAL AMORTIZABLE PLANT		27,129,080.06	10,000,537	16,080,663	3,857,309		
	NONDEPRECIABLE PLANT		172,413.08					
	TOTAL GAS PLANT		1,945,029,352.80	386,737,768	1,657,071,291	50,115,986		

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

\*\* Accrual rate based on individual asset amortization.

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**53.53 I. VALUATION**  
**A. ALL UTILITIES**

7. Provide a table, showing the cumulative depreciated original cost by year of installation for utility plant in service at the end of the test year (depreciable plant only) as claimed in the measures of value, in the following form:
- a. Year installed
  - b. Original cost – the total surviving cost associated with each installation year from all plant accounts.
  - c. Calculated depreciation reserve – the calculated depreciation reserve associated with each installation year from all plant accounts.
  - d. Depreciated original cost – (Column B minus Column C).
  - e. Total – cumulation year by year of the figures from Column D.
  - f. Column E divided by the total of the figure in Column D.

**Response:** Please refer to pages VII-3 through VII-6 of Columbia's Future Test Year depreciation study included in Exhibit No.109, Schedule No.1, Attachment A.

Please refer to pages II-3 through II-6 of Columbia's Fully Forecasted Rate Year depreciation study included in Exhibit No. 109, Schedule No. 1, Attachment B.

**COLUMBIA GAS OF PENNSYLVANIA, INC.**

**53.53 I. VALUATION**

**A. ALL UTILITIES**

17. Regardless of whether a claim for net negative or positive salvage is made, attach an exhibit showing gross salvage, cost of removal, and net salvage for the test year and four previous years by account.

**Response:** Please refer to pages VIII-2 through VIII-4 of Columbia's Future Test Year depreciation study included in Exhibit No. 109, Schedule No. 1, Attachment A.

Please refer to pages III-2 through III-4 of Columbia's Fully Forecasted Rate Year depreciation study included in Exhibit No. 109, Schedule No. 1, Attachment B.



**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**53.53 III. BALANCE SHEET AND OPERATING STATEMENT**  
**E. GAS UTILITIES**

12. Provide a schedule showing residential and commercial heating sales by unit (MCF) per month and degree days for the test year and three preceding twelve month periods.

Response:

Please see Exhibit No. 010 Schedule No. 1, pages 2-3 for residential and commercial heating sales by unit Dth.

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**53.53 III. BALANCE SHEET AND OPERATING STATEMENT**  
**E. GAS UTILITIES**

19. Provide growth patterns of usage and customer numbers per rate class, using historical and projected data.

Response:

See Exhibit No. 010, Schedule No. 2.

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**53.53 III. BALANCE SHEET AND OPERATING STATEMENT**  
**E. GAS UTILITIES**

22. Provide supporting data detailing curtailment adjustments, procedures and policies.

Response:

See Exhibit No. 10, Schedule No. 3.

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**53.53 III. BALANCE SHEET AND OPERATING STATEMENT**  
**E. GAS UTILITIES**

38. Identify company's policy with respect to replacing customers lost through attrition.

Response:

See Exhibit No. 10, Schedule No. 4 (38).

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**53.53 III. BALANCE SHEET AND OPERATING STATEMENT**  
**E. GAS UTILITIES**

39. Identify procedures developed to govern relationships between the respondent and potential customers; i.e., basically expansion, alternate energy requirements, availability of supply, availability of distribution facilities, ownership of metering and related facilities.

Response:

See Exhibit No. 10, Schedule No. 4 (39).

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**53.53 IV. RATE STRUCTURE**  
**B. GAS UTILITIES**

4. Provide an exhibit for each customer classification showing the following data for the test year and the four previous years.
- a. The maximum coincident peak day demand.
  - b. The maximum coincident three-day peak day demand.
  - c. The average monthly consumption in Mcf during the primary heating season (November - March).
  - d. The average monthly consumption in Mcf during the non-heating season (April - October).
  - e. The average daily consumption in Mcf for each twelve-month period.

Response:

See Exhibit No. 10, Schedule No 5.

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**53.53 IV. RATE STRUCTURE**  
**B. GAS UTILITIES**

13. Submit the projected demands for all customer classes for both purchased and produced gas for the three years following the test year filing.

Response:

See Exhibit No. 010, Schedule No. 6 (13), pages 2-4.

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**53.53 III. BALANCE SHEET AND OPERATING STATEMENT**  
**E. GAS UTILITIES**

3. Submit a schedule showing a reconciliation of test year MCF sales and line losses. List all amounts of gas purchased manufactured and transported.

Response: See Exhibit No. 10, Schedule No. 7 (3).

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**53.53 IV. RATE STRUCTURE**  
**B. GAS UTILITIES**

14. Supply an exhibit showing the gas deliveries to each customer class for the most recent 24-month period. The exhibit should identify the source of the gas, such as "purchased" (pipeline), "production" (includes purchases from local producers), "storage withdrawal", "propane/air", and "unaccounted for".

Response: See Exhibit No. 10, Schedule No. 7 (14).

COLUMBIA GAS OF PENNSYLVANIA, INC.

53.62

Weather Normalization Adjustment

**Response:** The forecasted volumes are normalized; therefore, no normalization was applied.



Exhibit No. 110  
Schedule No. 9  
Page 1 of 1  
Witness: A. L. Efland

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**ESTIMATED NUMBER OF BILLS AND NORMALIZED SALES VOLUMES**  
**TWELVE MONTHS ENDING November 30, 2016**  
**53.62**

Response: Please see Exhibit No.103, Schedule No. 3

Exhibit No.110  
Schedule No. 10  
Page 1 of 1  
Witness: A. L. Efland

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**FUTURE TEST YEAR SALES FORECAST**  
**TWELVE MONTHS ENDING NOVEMBER 30, 2016**  
**53.62**

Response: Please see Exhibit No. 10, Schedule No. 2

COLUMBIA GAS OF PENNSYLVANIA, INC.  
53.53 IV. RATE STRUCTURE  
B. GAS UTILITIES

1. Provide a Cost of Service Study showing the rate of return under the present and proposed tariffs for all customer classifications. The study should include a summary of the allocated measures of value, operating revenues, operating expenses and net return for each of the customer classifications at original cost and at the 5-year trended original cost.

Response: See Exhibit No. 111, Schedule Nos. 1 through 3

2. Provide a statement of testimony describing the complete methodology of the cost of service study.

Response: See Statement No. 11.

3. Provide a complete description and back-up calculations for all allocation factors.

Response: See Statement No. 11, Exhibit MPB-1, Exhibit MPB-2, and Exhibit MPB-3.

9. Supply a cost analysis supporting minimum charges for all rate schedules.

Response: See Exhibit No. 111, Schedule No. 1, Pages 14 through 30.

10. Supply a cost analysis supporting demand charges for all tariffs, which contain demand charges.

Response: None of Columbia's tariff rate schedules contain a distribution cost demand charge.

COLUMBIA GAS OF PENNSYLVANIA, INC.  
53.53 IV. RATE STRUCTURE  
B. GAS UTILITIES

5. Submit a Bill Frequency Analysis for each rate. The analysis should include the rate schedule and block interval, the number of bills at each interval, the cumulative number of bills at each interval, the Mcf or therms at each interval, the cumulative Mcf or therms at each interval, the accumulation of Mcf or therms passing through each interval, and the revenue at each interval for both the present and the proposed rates. The Analysis should show only those revenues collected from the basic tariff.

Response: Refer to Exhibit No. 103, Schedule No. 1, (Revenue @ Current Rates Based on Forecast Adjusted Bills and Volumes) and Exhibit No. 103, Schedule No. 7, (Revenue @ Proposed Rates Based on Forecast Adjusted Bills and Volumes). (Bell)

7. Supply a graph of present and proposed base rates on hyperbolic cross section paper.

Response: Refer to Exhibit No. 111, Schedule No. 5. (Bell)

12. Supply a tabulation of base rate bills for each rate schedule comparing the existing rates to proposed rates. The tabulation should show the dollar difference and the per cent increase or decrease.

Response: Refer to Exhibit No. 103, Schedule No.8 and Exhibit No. 111, Schedule 6. (Bell)

COLUMBIA GAS OF PENNSYLVANIA, INC.  
53.53 III. BALANCE SHEET AND OPERATING STATEMENT  
A. ALL UTILITIES

47. Submit a schedule showing rate of return on facilities allocated to serve wholesale customers.

Response: Columbia Gas of Pennsylvania, Inc. does not offer service to wholesale customers. Therefore, no facilities were allocated within the class cost of service studies presented in Exhibit No. 111.

COLUMBIA GAS OF PENNSYLVANIA, INC.  
ALLOCATED COST OF SERVICE - TABLE OF CONTENTS

DOCKET NO.: R-2015-2468056

WITNESS: M. P. BALMERT

STUDY TYPE: CUSTOMER/DEMAND

FORECASTED TEST YEAR: DECEMBER 31, 2017

111, SCHEDULE 1

<u>PAGE</u>	<u>DESCRIPTION</u>
1	RATE OF RETURN BY CLASS - PROFORMA @ PROPOSED RATES
2	RATE OF RETURN BY CLASS - CURRENT @ CURRENT RATES
3	GROSS PLANT (Accounts 101 & 106)
4	DEPRECIATION RESERVE
5	DEPRECIATION AND AMORTIZATION EXPENSE
6	OPERATING REVENUE @ PROPOSED & CURRENT RATES
7	PRODUCTION & DISTRIBUTION O&M EXPENSES
8	OTHER O&M EXPENSES
9	TAXES OTHER THAN INCOME TAXES
10	RATE BASE
11	STATE/FEDERAL INCOME TAXES
12	ALLOCATION FACTORS
13	ALLOCATION FACTORS (CONT.)
14-22	CUSTOMER CHARGE - INCLUDING CUSTOMER COMPONENT OF MAI
23-30	CUSTOMER CHARGE - EXCLUDING CUSTOMER COMPONENT OF MA

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**RATE OF RETURN BY CLASS - PROFORMA @ PROPOSED RATES**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017**

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1

PAGE 1 OF 30

WITNESS: M. P. BALMERT

LINE NO.	ACCOUNT TITLE (A)	ALLOC FACTOR (B)	TOTAL COMPANY (C) \$	RSS/RDS (D) \$	SGSS1/SCD1/SGDS1 (E) \$	SGSS2/SCD2/SGDS2 (F) \$	SDS/LGSS (G) \$	LDS/LGSS (H) \$	MLDS (I) \$
1	TOTAL REVENUE [PAGE 6]		547,467,040	402,901,299	48,266,108	53,179,404	21,686,866	19,780,346	1,653,016
2	PRODUCTS PURCHASED [PAGE 7]		124,134,259	90,195,150	14,478,538	16,218,817	2,742,911	226,707	272,136
3	OPERATING & MAINTENANCE EXPENSES [PAGES 7 & 8]		183,479,983	153,793,085	12,696,921	9,100,922	4,065,970	3,782,100	40,985
4	DEPRECIATION & AMORTIZATION [PAGE 5]		61,910,132	49,061,886	5,079,182	4,222,905	1,799,998	1,706,790	39,372
5	TAXES OTHER THAN INCOME [PAGE 9]		<u>3,090,284</u>	<u>2,485,834</u>	<u>247,087</u>	<u>192,922</u>	<u>84,693</u>	<u>79,111</u>	<u>638</u>
6	TOTAL EXPENSES & TAXES OTHER THAN INCOME		372,614,658	295,535,954	32,501,727	29,735,566	8,693,572	5,794,708	353,131
7	OPERATING INCOME BEFORE TAXES		174,852,382	107,365,345	15,764,381	23,443,838	12,993,294	13,985,639	1,299,885
8	INCOME TAXES		53,444,203	29,569,516	4,919,089	8,400,648	4,794,952	5,230,285	529,713
9	INVESTMENT TAX CREDIT	12	<u>(360,240)</u>	<u>(283,682)</u>	<u>(30,087)</u>	<u>(24,594)</u>	<u>(11,070)</u>	<u>(10,609)</u>	<u>(198)</u>
10	NET INCOME TAXES		53,083,963	29,285,834	4,889,001	8,376,054	4,783,882	5,219,676	529,515
11	OPERATING INCOME		121,768,419	78,079,511	10,875,379	15,067,784	8,209,413	8,765,963	770,370
12	RATE BASE [PAGE 10]		1,494,091,075	1,170,351,101	127,945,920	104,274,707	46,597,271	44,138,664	783,413
13	RATE OF RETURN EARNED ON RATE BASE		8.150%	6.671%	8.500%	14.450%	17.618%	19.860%	98.335%
14	UNITIZED RETURN		1.00	0.82	1.04	1.77	2.16	2.44	12.07

**COLUMBIA GAS OF PENNSYLVANIA, INC.  
RATE OF RETURN BY CLASS - CURRENT @ CURRENT RATES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017**

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1  
PAGE 2 OF 30  
WITNESS: M. P. BALMERT

LINE NO.	ACCOUNT TITLE (A)	ALLOC FACTOR (B)	TOTAL COMPANY (C) \$	RSS/RDS (D) \$	SGSS1/SCD1/SGDS1 (E) \$	SGSS2/SCD2/SGDS2 (F) \$	SDS/LGSS (G) \$	LDS/LGSS (H) \$	MLDS (I) \$
1	TOTAL REVENUE [PAGE 6]		492,210,045	359,721,504	43,984,577	49,415,237	19,835,952	17,600,210	1,652,566
2	PRODUCTS PURCHASED [PAGE 7]		124,134,259	90,195,150	14,478,538	16,218,817	2,742,911	226,707	272,136
3	OPERATING & MAINTENANCE EXPENSES [PAGES 7 & 8]		182,774,037	153,241,433	12,642,222	9,052,832	4,042,323	3,754,247	40,980
4	DEPRECIATION & AMORTIZATION [PAGE 5]		61,910,132	49,061,886	5,079,182	4,222,905	1,799,998	1,706,790	39,372
5	TAXES OTHER THAN INCOME [PAGE 9]		<u>3,090,284</u>	<u>2,485,834</u>	<u>247,087</u>	<u>192,922</u>	<u>84,693</u>	<u>79,111</u>	<u>638</u>
6	TOTAL EXPENSES & TAXES OTHER THAN INCOME		371,908,712	294,984,303	32,447,028	29,687,476	8,669,925	5,766,855	353,125
7	OPERATING INCOME BEFORE TAXES		120,301,333	64,737,201	11,537,549	19,727,761	11,166,027	11,833,355	1,299,440
8	INCOME TAXES [PAGE 11]		31,682,589	12,564,212	3,232,913	6,918,223	4,066,015	4,371,692	529,536
9	INVESTMENT TAX CREDIT	12	<u>(360,240)</u>	<u>(283,682)</u>	<u>(30,087)</u>	<u>(24,594)</u>	<u>(11,070)</u>	<u>(10,609)</u>	<u>(198)</u>
10	NET INCOME TAXES		31,322,349	12,280,530	3,202,825	6,893,629	4,054,944	4,361,083	529,338
11	OPERATING INCOME		88,978,984	52,456,671	8,334,724	12,834,132	7,111,083	7,472,272	770,102
12	RATE BASE [PAGE 10]		1,494,091,075	1,170,351,101	127,945,920	104,274,707	46,597,271	44,138,664	783,413
13	RATE OF RETURN EARNED ON RATE BASE		5.955%	4.482%	6.514%	12.308%	15.261%	16.929%	98.301%
14	UNITIZED RETURN		1.00	0.75	1.09	2.07	2.56	2.84	16.51



**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**GROSS PLANT (Accounts 101 & 106)**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017**

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1  
PAGE 3 OF 30  
WITNESS: M. P. BALMERT

LINE NO.	ACCT. NO. (A)	ACCOUNT TITLE (B)	ALLOC FACTOR (C)	TOTAL COMPANY (D) \$	RSS/RDS (E) \$	SGSS1/SCD1/SGDS1 (F) \$	SGSS2/SCD2/SGDS2 (G) \$	SDS/LGSS (H) \$	LDS/LGSS (I) \$	MLDS (J) \$
1	301-305	INTANGIBLE PLANT	11	36,463,839	28,720,378	3,041,813	2,484,281	1,121,628	1,076,777	18,961
2	350-362	UNDERGROUND STORAGE PLANT	25	5,882,069	4,312,086	716,142	725,553	110,936	9,176	8,176
		<u>DISTRIBUTION PLANT</u>								
3	374.10	LAND - CITY GATE & M/L IND M&R	20	21,944	16,543	1,971	1,679	882	869	0
4	374.20	LAND - OTHER DISTRIBUTION	20	477,118	359,700	42,845	36,500	19,175	18,899	0
5	374.30	LAND RIGHTS - CITY GATE MAIN LINE	20	95,361	71,893	8,563	7,295	3,833	3,777	0
6	374.40	LAND RIGHTS - OTHER DISTRIBUTION	20	2,737,177	2,063,558	245,799	209,394	110,007	108,420	0
7	374.40	DIRECT - LAND RIGHTS-OTHER DISTRIBUTION		0	0	0	0	0	0	0
8	374.41	LAND RIGHTS - OTHER DISTRIBUTION LOC	20	13	11	1	0	0	1	0
9	374.50	RIGHTS OF WAY	20	3,238,374	2,441,411	290,806	247,736	130,150	128,272	0
10	374.50	DIRECT - RIGHTS OF WAY		1,246	0	0	0	0	0	1,246
11	375.20	M & R STRUCTURES - CITY GATE	20	743,068	560,199	66,728	56,845	29,864	29,433	0
12	375.31	M & R STRUCTURES - LOCAL GAS PURCH	20	946,925	713,887	85,034	72,440	38,057	37,508	0
13	375.40	M & R STRUCTURES - REGULATING	20	3,813,061	2,874,667	342,413	291,699	153,247	151,035	0
14	375.40	DIRECT - M & R STRUCTURES - REGULATING	20	27,124	0	0	0	0	0	27,124
15	375.60	M & R STRUCTURES - DIST. IND. M & R	17	87,670	0	3,514	16,151	36,218	31,787	0
16	375.70	M & R STRUCTURES - OTHER	11	7,821,943	6,160,875	652,506	532,909	240,603	230,982	4,067
17	375.71	M & R STRUCTURES - OTHER LEASED	11	4,517,569	3,558,218	376,856	307,782	138,960	133,404	2,349
18	375.80	M & R STRUCTURES - COMMUNICATION	20	16,515	12,451	1,483	1,263	664	654	0
19	376.00	MAINS	20	1,354,749,181	1,021,345,408	121,656,477	103,638,312	54,447,370	53,661,615	0
20	376.00	DIRECT - MAINS - MDS		226,885	0	0	0	0	0	226,885
21	376.08	MAINS-CSL REPLACEMENTS	20	23,785,876	17,932,172	2,135,972	1,819,620	955,954	942,159	0
22	376.30	MAINS-BARE STEEL	20	68,743,268	51,825,550	6,173,146	5,258,860	2,762,792	2,722,921	0
23	376.30	DIRECT - MAINS-BARE STEEL		129,516	0	0	0	0	0	129,516
24	376.80	MAINS-CAST IRON	20	523,053	394,330	46,970	40,014	21,022	20,718	0
25	378.10	M & R EQUIP - GENERAL	20	55,331	41,714	4,969	4,233	2,224	2,192	0
26	378.20	M & R EQUIP - GENERAL - REGULATING	20	46,736,190	35,234,413	4,196,910	3,575,319	1,878,328	1,851,221	0
27	378.20	DIRECT - M & R EQUIP-GEN-REG		291,035	0	0	0	0	0	291,035
28	378.30	M & R EQUIP - LOCAL GAS PURCHASES	20	461,790	348,144	41,469	35,327	18,559	18,292	0
29	379.10	M & R EQUIP - CITY GATE	20	141,567	106,727	12,713	10,830	5,690	5,608	0
30	379.11	M & R EQUIP - EXCHANGE GAS	20	(450)	(339)	(40)	(34)	(18)	(18)	0
31	380.00	SERVICES	15	490,342,928	445,265,703	36,118,660	7,595,412	1,015,010	348,144	0
32	380.00	DIRECT - SERVICES		39,403	0	0	0	0	0	39,403
33	380.12	CSL REPLACEMENT	15	0	0	0	0	0	0	0
34	381.00	METERS	16	37,714,590	28,095,484	1,518,767	7,606,656	380,540	107,109	6,034
35	381.10	AUTOMATIC METER READING	16	24,289,208	18,094,246	978,126	4,898,890	245,078	68,981	3,886
36	382.00	METER INSTALLATIONS	16	37,776,149	28,141,342	1,521,246	7,619,071	381,161	107,284	6,044
37	383.00	HOUSE REGULATORS	21	12,047,377	10,914,201	878,013	224,322	26,143	4,699	0
38	384.00	HOUSE REG INSTALLATIONS	21	3,864,772	3,501,252	281,665	71,962	8,387	1,507	0
39	385.00	IND M&R EQUIPMENT	17	5,047,477	0	202,303	929,846	2,085,214	1,830,114	0
40	385.00	DIRECT - IND M&R EQUIPMENT		373,291	0	0	0	0	0	373,291
41	385.10	IND M&R EQUIPMENT - LG VOLUME	17	1,151,820	0	46,165	212,188	475,840	417,627	0
42	387.10	OTHER EQUIP DISTRIBUTION	11	16,603	13,078	1,385	1,131	511	490	9
43	387.20	OTHER EQUIP ODORIZATION	11	117,248	92,349	9,781	7,988	3,607	3,462	61
44	387.42	OTHER EQUIP RADIO	11	121,945	96,049	10,173	8,308	3,751	3,601	63
45	387.44	OTHER EQUIP COMMUNICATION	11	635,499	500,545	53,013	43,297	19,548	18,766	331
46	387.46	OTHER EQUIP CUSTOMER INFO SERVICE	11	3,572,300	2,813,687	298,001	243,381	109,884	105,490	1,858
47	387.45	DIRECT - OTHER EQUIP CUSTOMER INFO SERVICE		56,078	0	0	0	0	0	56,078
48	387.50	GPS EQUIPMENT	11	4,304,405	3,390,322	359,074	293,259	132,404	127,109	2,238
49		TOTAL DISTRIBUTION PLANT		2,141,859,442	1,686,979,784	178,663,472	145,919,883	65,880,656	63,244,131	1,171,518
50	389-398	GENERAL PLANT	11	27,360,850	21,550,500	2,282,442	1,864,095	841,620	807,966	14,228
51		TOTAL GROSS PLANT		2,211,566,200	1,741,562,748	184,703,869	150,993,812	67,954,839	65,138,050	1,212,883

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**DEPRECIATION RESERVE**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017**

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1  
PAGE 4 OF 30  
WITNESS: M. P. BALMERT

LINE NO.	ACCT. NO. (A)	ACCOUNT TITLE (B)	ALLOC FACTOR (C)	TOTAL COMPANY (D) \$	RSS/RDS (E) \$	SGSS1/SCD1/SGDS1 (F) \$	SGSS2/SCD2/SGDS2 (G) \$	SDS/LGSS (H) \$	LDS/LGSS (I) \$	MLDS (J) \$
1	301-305	INTANGIBLE PLANT	11	9,799,828	7,718,737	817,502	667,662	301,443	289,389	5,096
2	350-362	UNDERGROUND STORAGE PLANT	25	1,458,480	1,069,197	177,570	179,904	27,507	2,275	2,027
DISTRIBUTION PLANT										
3	374.10	LAND - CITY GATE & M/L IND M&R	20	0	0	0	0	0	0	0
4	374.20	LAND - OTHER DISTRIBUTION	20	146,190	110,213	13,128	11,184	5,875	5,791	0
5	374.30	LAND RIGHTS - CITY GATE MAIN LINE	20	0	0	0	0	0	0	0
6	374.40	LAND RIGHTS - OTHER DISTRIBUTION	20	683,587	515,356	61,386	52,294	27,473	27,077	0
7	374.40	DIRECT - LAND RIGHTS-OTHER DISTRIBUTION		0	0	0	0	0	0	0
8	374.41	LAND RIGHTS - OTHER DISTRIBUTION LOC	20	0	0	0	0	0	0	0
9	374.50	RIGHTS OF WAY	20	1,646,725	1,241,466	147,876	125,974	66,182	65,227	0
10	374.50	DIRECT - RIGHTS OF WAY		753	0	0	0	0	0	753
11	375.20	M & R STRUCTURES - CITY GATE	20	0	0	0	0	0	0	0
12	375.31	M & R STRUCTURES - LOCAL GAS PURCH	20	0	0	0	0	0	0	0
13	375.40	M & R STRUCTURES - REGULATING	20	1,404,563	1,058,900	126,130	107,449	56,449	55,635	0
14	375.40	DIRECT - M & R STRUCTURES - REGULATING	20	1,797	0	0	0	0	0	1,797
15	375.60	M & R STRUCTURES - DIST. IND. M & R	17	74,808	0	2,998	13,781	30,905	27,124	0
16	375.70	M & R STRUCTURES - OTHER	11	2,587,833	2,038,281	215,877	176,309	79,602	76,419	1,346
17	375.71	M & R STRUCTURES - OTHER LEASED	11	1,080,296	850,884	90,118	73,601	33,230	31,901	562
18	375.80	M & R STRUCTURES - COMMUNICATION	20	6,866	5,176	617	525	276	272	0
19	376.00	MAINS	20	164,641,444	124,123,185	14,784,802	12,595,071	6,616,940	6,521,448	0
20	376.00	DIRECT - MAINS - MDS		38,767	0	0	0	0	0	38,767
21	376.08	MAINS-CSL REPLACEMENTS	20	0	0	0	0	0	0	0
22	376.30	MAINS-BARE STEEL	20	38,884,469	29,315,001	3,491,825	2,974,662	1,562,767	1,540,214	0
23	376.30	DIRECT - MAINS-BARE STEEL		118,266	0	0	0	0	0	118,266
24	376.80	MAINS-CAST IRON	20	316,848	238,872	28,453	24,239	12,734	12,550	0
25	378.10	M & R EQUIP - GENERAL	20	0	0	0	0	0	0	0
26	378.20	M & R EQUIP - GENERAL - REGULATING	20	11,246,689	8,478,879	1,009,953	860,372	452,004	445,481	0
27	378.20	DIRECT - M & R EQUIP-GEN-REG		16,589	0	0	0	0	0	16,589
28	378.30	M & R EQUIP - LOCAL GAS PURCHASES	20	0	0	0	0	0	0	0
29	379.10	M & R EQUIP - CITY GATE	20	98,046	73,917	8,805	7,501	3,941	3,884	0
30	379.11	M & R EQUIP - EXCHANGE GAS	20	0	0	0	0	0	0	0
31	380.00	SERVICES	15	122,253,501	111,014,737	9,005,193	1,893,707	253,065	86,800	0
32	380.00	DIRECT - SERVICES		24,113	0	0	0	0	0	24,113
33	380.12	CSL REPLACEMENT	15	0	0	0	0	0	0	0
34	381.00	METERS	16	16,508,949	12,298,342	664,815	3,329,690	166,575	46,885	2,641
35	381.10	AUTOMATIC METER READING	16	10,448,842	7,783,865	420,775	2,107,427	105,429	29,675	1,672
36	382.00	METER INSTALLATIONS	16	12,548,434	9,347,956	505,325	2,530,894	126,614	35,638	2,008
37	383.00	HOUSE REGULATORS	21	3,829,549	3,469,342	279,098	71,306	8,310	1,494	0
38	384.00	HOUSE REG INSTALLATIONS	21	3,044,466	2,758,104	221,881	56,688	6,607	1,187	0
39	385.00	IND M&R EQUIPMENT	17	3,180,306	0	127,467	585,876	1,313,848	1,153,115	0
40	385.00	DIRECT - IND M&R EQUIPMENT		85,568	0	0	0	0	0	85,568
41	385.10	IND M&R EQUIPMENT - LG VOLUME	17	0	0	0	0	0	0	0
42	387.10	OTHER EQUIP DISTRIBUTION	11	0	0	0	0	0	0	0
43	387.20	OTHER EQUIP ODORIZATION	11	0	0	0	0	0	0	0
44	387.42	OTHER EQUIP RADIO	11	0	0	0	0	0	0	0
45	387.44	OTHER EQUIP COMMUNICATION	11	0	0	0	0	0	0	0
46	387.46	OTHER EQUIP CUSTOMER INFO SERVICE	11	1,149,527	905,413	95,894	78,317	35,359	33,946	598
47	387.45	DIRECT - OTHER EQUIP CUSTOMER INFO SERVICE		2,097	0	0	0	0	0	2,097
48	387.50	GPS EQUIPMENT	11	811,351	639,053	67,683	55,277	24,957	23,959	422
49		TOTAL DISTRIBUTION PLANT		396,881,239	316,266,940	31,370,097	27,732,143	10,989,141	10,225,720	297,199
50	389-398	GENERAL PLANT	11	12,949,752	10,199,743	1,080,268	882,267	398,334	382,406	6,734
51		TOTAL DEPRECIATION RESERVE		421,089,299	335,254,616	33,445,437	29,461,975	11,716,425	10,899,790	311,056

COLUMBIA GAS OF PENNSYLVANIA, INC.  
DEPRECIATION AND AMORTIZATION EXPENSE  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1  
PAGE 5 OF 30  
WITNESS: M. P. BALMERT

LINE NO.	ACCT. NO. (A)	ACCOUNT TITLE (B)	ALLOC FACTOR (C)	TOTAL COMPANY (D) \$	RSS/RDS (E) \$	SGSS1/SCD1/SGDS1 (F) \$	SGSS2/SCD2/SGDS2 (G) \$	SDS/LGSS (H) \$	LDS/LGSS (I) \$	MLDS (J) \$
1	301-305	INTANGIBLE PLANT	11	4,748,209	3,739,880	396,096	323,496	146,055	140,215	2,469
2	350-362	UNDERGROUND STORAGE PLANT	25	288,254	211,316	35,095	35,556	5,437	450	401
		DISTRIBUTION PLANT								
3	374.10	LAND - CITY GATE & M/L IND M&R	20	0	0	0	0	0	0	0
4	374.20	LAND - OTHER DISTRIBUTION	20	0	0	0	0	0	0	0
5	374.30	LAND RIGHTS - CITY GATE MAIN LINE	20	0	0	0	0	0	0	0
6	374.40	LAND RIGHTS - OTHER DISTRIBUTION	20	49,497	37,316	4,445	3,787	1,989	1,961	0
7	374.40	DIRECT - LAND RIGHTS-OTHER DISTRIBUTION	20	0	0	0	0	0	0	0
8	374.41	LAND RIGHTS - OTHER DISTRIBUTION LOC	20	0	0	0	0	0	0	0
9	374.50	RIGHTS OF WAY	20	41,861	31,559	3,759	3,202	1,682	1,658	0
10	374.50	DIRECT - RIGHTS OF WAY	20	16	0	0	0	0	0	16
11	375.20	M & R STRUCTURES - CITY GATE	20	0	0	0	0	0	0	0
12	375.31	M & R STRUCTURES - LOCAL GAS PURCH	20	0	0	0	0	0	0	0
13	375.40	M & R STRUCTURES - REGULATING	20	117,206	88,362	10,525	8,966	4,711	4,643	0
14	375.40	DIRECT - M & R STRUCTURES - REGULATING	20	586	0	0	0	0	0	586
15	375.60	M & R STRUCTURES - DIST. IND. M & R	17	806	0	32	149	333	292	0
16	375.70	M & R STRUCTURES - OTHER	11	253,915	199,994	21,182	17,299	7,810	7,498	132
17	375.71	M & R STRUCTURES - OTHER LEASED	11	501,481	394,986	41,834	34,166	15,426	14,809	261
18	375.80	M & R STRUCTURES - COMMUNICATION	20	326	246	29	25	13	13	0
19	376.00	MAINS	20	27,988,692	21,100,675	2,513,385	2,141,135	1,124,866	1,108,632	0
20	376.00	DIRECT - MAINS - MDS	20	4,197	0	0	0	0	0	4,197
21	376.08	MAINS-CSL REPLACEMENTS	20	0	0	0	0	0	0	0
22	376.30	MAINS-BARE STEEL	20	1,862,782	1,404,351	167,278	142,503	74,865	73,785	0
23	376.30	DIRECT - MAINS-BARE STEEL	20	3,188	0	0	0	0	0	3,188
24	376.80	MAINS-CAST IRON	20	14,024	10,573	1,259	1,073	564	556	0
25	378.10	M & R EQUIP - GENERAL	20	0	0	0	0	0	0	0
26	378.20	M & R EQUIP - GENERAL - REGULATING	20	1,507,886	1,136,795	135,408	115,353	60,602	59,727	0
27	378.20	DIRECT - M & R EQUIP-GEN-REG	20	7,916	0	0	0	0	0	7,916
28	378.30	M & R EQUIP - LOCAL GAS PURCHASES	20	0	0	0	0	0	0	0
29	379.10	M & R EQUIP - CITY GATE	20	4,193	3,161	377	321	169	166	0
30	379.11	M & R EQUIP - EXCHANGE GAS	20	0	0	0	0	0	0	0
31	380.00	SERVICES	15	13,906,289	12,627,884	1,024,337	215,408	28,786	9,874	0
32	380.00	DIRECT - SERVICES	15	1,028	0	0	0	0	0	1,028
33	380.12	CSL REPLACEMENT	15	0	0	0	0	0	0	0
34	381.00	METERS	16	913,408	680,443	36,783	184,225	9,216	2,594	146
35	381.10	AUTOMATIC METER READING	16	1,743,495	1,298,817	70,211	351,646	17,592	4,952	279
36	382.00	METER INSTALLATIONS	16	732,417	545,614	29,494	147,721	7,390	2,080	117
37	383.00	HOUSE REGULATORS	21	313,185	283,727	22,825	5,832	680	122	0
38	384.00	HOUSE REG INSTALLATIONS	21	64,393	58,336	4,693	1,199	140	25	0
39	385.00	IND M&R EQUIPMENT	17	213,714	0	8,566	39,370	88,289	77,488	0
40	385.00	DIRECT - IND M&R EQUIPMENT	17	13,396	0	0	0	0	0	13,396
41	385.10	IND M&R EQUIPMENT - LG VOLUME	17	0	0	0	0	0	0	0
42	387.10	OTHER EQUIP DISTRIBUTION	11	0	0	0	0	0	0	0
43	387.20	OTHER EQUIP ODORIZATION	11	0	0	0	0	0	0	0
44	387.42	OTHER EQUIP RADIO	11	0	0	0	0	0	0	0
45	387.44	OTHER EQUIP COMMUNICATION	11	0	0	0	0	0	0	0
46	387.46	OTHER EQUIP CUSTOMER INFO SERVICE	11	205,583	161,925	17,150	14,006	6,324	6,071	107
47	387.45	DIRECT - OTHER EQUIP CUSTOMER INFO SERVICE	11	1,800	0	0	0	0	0	1,800
48	387.50	GPS EQUIPMENT	11	490,955	386,696	40,956	33,449	15,102	14,498	255
49		TOTAL DISTRIBUTION PLANT		50,958,235	40,451,458	4,154,526	3,460,835	1,466,548	1,391,443	33,426
51	389-398	GENERAL PLANT	11	1,396,645	1,100,054	116,508	95,153	42,961	41,243	726
52		NET DEPRECIATION & AMORTIZATION EXPENSE		57,391,343	45,502,708	4,702,224	3,915,040	1,661,000	1,573,350	37,022
53		AMORTIZATION OF NET NEGATIVE SALVAGE	11	4,518,788	3,559,178	376,957	307,865	138,998	133,440	2,350
54		TOTAL AMORTIZATION AND DEPRECIATION EXPENSE		61,910,131	49,061,886	5,079,182	4,222,905	1,799,998	1,706,790	39,372

COLUMBIA GAS OF PENNSYLVANIA, INC.  
 OPERATING REVENUE @ PROPOSED & CURRENT RATES  
 FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017

ALLOCATED COST OF SERVICE  
 CUSTOMER/DEMAND

111, SCHEDULE 1  
 PAGE 6 OF 30  
 WITNESS: M. P. BALMERT

LINE NO.	ACCT NO. (A)	ACCOUNT TITLE (B)	ALLOC FACTOR (C)	TOTAL COMPANY (D)	RSS/RDS (E)	SGSS1/SCD1/SGDS1 (F)	SGSS2/SCD2/SGDS2 (G)	SDS/LGSS (H)	LDS/LGSS (I)	MLDS (J)
				\$	\$	\$	\$	\$	\$	\$
<u>PROPOSED OPERATING REVENUE</u>										
SALES REVENUE										
1	480/481	SALES BASE REVENUE		251,725,457	204,931,466	24,572,894	19,638,199	2,410,509	152,510	19,879
2		USP REVENUE		18,772,538	18,772,538	0	0	0	0	0
3		STAS REVENUE		0	0	0	0	0	0	0
4		RIDER CC - CUSTOMER CHOICE		33,400	24,298	4,337	4,765	0	0	0
5		GAS PROCUREMENT REVENUE		2,387,896	1,688,702	301,432	331,172	61,506	5,084	0
6		MERCHANT FUNCTION REVENUE		1,103,635	1,010,792	44,239	48,604	0	0	0
7		GAS COST REVENUE		116,090,077	84,636,917	13,442,546	14,768,860	2,742,911	226,707	272,136
8		TOTAL SALES REVENUE		390,113,003	311,064,713	38,365,448	34,791,600	5,214,926	384,301	292,015
TRANSPORTATION REVENUE										
9	489.00	TRANSPORTATION BASE REVENUE		135,924,181	78,979,581	8,698,910	16,749,071	16,156,593	15,256,731	83,295
10		USP REVENUE		5,836,220	5,836,220	0	0	0	0	0
11		STAS REVENUE		0	0	0	0	0	0	0
12		RIDER CC - CUSTOMER CHOICE		13,384	7,554	1,535	4,295	0	0	0
13		FLEX REVENUE		5,654,888	0	3,645	34,665	256,411	4,087,013	1,273,154
14		GAS COST REVENUE		8,044,182	5,558,233	1,035,992	1,449,957	0	0	0
15		TOTAL TRANSPORTATION REVENUE		155,472,855	90,381,588	9,740,082	18,237,988	16,413,004	19,343,744	1,356,449
MISCELLANEOUS REVENUE										
16	487.00	FORFEITED DISCOUNTS	10	1,327,956	970,297	118,693	133,420	53,556	47,528	4,462
17	488.00	MISCELLANEOUS REVENUE	6	145,854	132,981	10,591	2,064	184	32	3
18	493.00	RENTS	11	158,725	125,018	13,241	10,814	4,882	4,687	83
19	495.00	OTHER	6	248,647	226,701	18,054	3,518	313	55	5
20		TOTAL MISCELLANEOUS REVENUE		1,881,182	1,454,998	160,578	149,816	58,936	52,301	4,552
21		TOTAL PROPOSED OPERATING REVENUE		547,467,040	402,901,299	48,266,108	53,179,404	21,686,866	19,780,346	1,653,016
<u>CURRENT OPERATING REVENUE</u>										
SALES REVENUE										
22	480/481	SALES BASE REVENUE		215,343,199	174,174,360	21,428,464	17,418,550	2,170,964	130,982	19,879
23		USP REVENUE		16,522,555	16,522,555	0	0	0	0	0
24		STAS REVENUE		0	0	0	0	0	0	0
25		RIDER CC - CUSTOMER CHOICE		33,400	24,298	4,337	4,765	0	0	0
26		GAS PROCUREMENT REVENUE		2,387,896	1,688,702	301,432	331,172	61,506	5,084	0
27		MERCHANT FUNCTION REVENUE		1,103,635	1,010,792	44,239	48,604	0	0	0
28		GAS COST REVENUE		116,090,077	84,636,917	13,442,546	14,768,860	2,742,911	226,707	272,136
29		TOTAL SALES REVENUE		351,480,762	278,057,624	35,221,018	32,571,951	4,975,381	362,773	292,015
TRANSPORTATION REVENUE										
30	489.00	TRANSPORTATION BASE REVENUE		120,133,096	69,604,408	7,573,801	15,218,033	14,550,635	13,102,924	83,295
31		USP REVENUE		5,136,720	5,136,720	0	0	0	0	0
32		STAS REVENUE		0	0	0	0	0	0	0
33		RIDER CC - CUSTOMER CHOICE		13,384	7,554	1,535	4,295	0	0	0
34		FLEX REVENUE		5,654,888	0	3,645	34,665	256,411	4,087,013	1,273,154
35		GAS COST REVENUE		8,044,182	5,558,233	1,035,992	1,449,957	0	0	0
36		TOTAL TRANSPORTATION REVENUE		138,982,270	80,306,915	8,614,973	16,706,950	14,807,046	17,189,937	1,356,449
MISCELLANEOUS REVENUE										
37	487.00	FORFEITED DISCOUNTS	10	1,193,787	872,264	106,701	119,940	48,145	42,726	4,011
38	488.00	MISCELLANEOUS REVENUE	6	145,854	132,981	10,591	2,064	184	32	3
39	493.00	RENTS	11	158,725	125,018	13,241	10,814	4,882	4,687	83
40	495.00	OTHER	6	248,647	226,701	18,054	3,518	313	55	5
41		TOTAL MISCELLANEOUS REVENUE		1,747,013	1,356,965	148,586	136,336	53,525	47,500	4,102
42		TOTAL CURRENT OPERATING REVENUE		492,210,045	359,721,504	43,984,577	49,415,237	19,835,952	17,600,210	1,652,566

**COLUMBIA GAS OF PENNSYLVANIA, INC.  
PRODUCTION & DISTRIBUTION O&M EXPENSES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017**

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1  
PAGE 7 OF 30  
WITNESS: M. P. BALMERT

LINE NO.	ACCT NO. (A)	ACCOUNT TITLE (B)	ALLOC FACTOR (C)	TOTAL COMPANY (D) \$	RSS/RDS (E) \$	SGSS1/SCD1/SGDS1 (F) \$	SGSS2/SCD2/SGDS2 (G) \$	SDS/LGSS (H) \$	LDS/LGSS (I) \$	MLDS (J) \$
<u>PURCHASED GAS EXPENSES</u>										
1		GAS PURCHASED COST		124,134,259	90,195,150	14,478,538	16,218,817	2,742,911	226,707	272,136
2	807.00	PURCHASED GAS EXPENSE	4	(1,284,339)	(933,175)	(149,805)	(167,812)	(28,384)	(2,350)	(2,813)
3	807.00	GAS PROCUREMENT EXPENSE	4	<u>2,387,896</u>	<u>1,734,998</u>	<u>278,524</u>	<u>312,003</u>	<u>52,773</u>	<u>4,370</u>	<u>5,230</u>
4		TOTAL PURCHASED GAS		<u>125,237,816</u>	<u>90,996,972</u>	<u>14,607,257</u>	<u>16,363,008</u>	<u>2,767,300</u>	<u>228,727</u>	<u>274,553</u>
<u>UNDERGROUND STORAGE OPERATIONS EXPENSES</u>										
5	816.00	WELLS	25	7,627	5,591	929	941	144	12	11
6	817.00	LINES	25	12,342	9,048	1,503	1,522	233	19	17
7	818.00	COMPRESSOR STATION	25	150,786	110,540	18,358	18,600	2,844	235	210
8	820.00	M & R	25	5,229	3,833	637	645	99	8	7
9	821.00	PURIFICATION	25	1,199	879	146	148	23	2	2
10	823.00	GAS LOSSES	25	2,053	1,505	250	253	39	3	3
11	825.00	STORAGE WELL ROYALTIES	25	<u>10,586</u>	<u>7,761</u>	<u>1,289</u>	<u>1,306</u>	<u>200</u>	<u>17</u>	<u>15</u>
12		TOTAL UNDERGROUND STORAGE OPERATIONS		189,822	139,156	23,111	23,415	3,580	296	264
<u>UNDERGROUND STORAGE MAINTENANCE EXPENSES</u>										
13	832.00	WELLS	25	2,871	2,105	350	354	54	5	4
14	834.00	COMPRESSOR STATION	25	3,275	2,401	399	404	62	5	5
15	836.00	PURIFICATION	25	6,551	4,802	798	808	124	10	9
16	840.00	OTHER STORAGE - OPERATION SUPERV - ENG	25	6	5	1	1	0	0	0
16		TOTAL UNDERGROUND STORAGE MAINTENANCE		12,703	9,313	1,547	1,567	240	20	18
17		TOTAL UNDERGROUND STORAGE		<u>202,525</u>	<u>148,469</u>	<u>24,657</u>	<u>24,982</u>	<u>3,820</u>	<u>316</u>	<u>282</u>
<u>DISTRIBUTION OPERATIONS EXPENSES</u>										
18	870.00	SUPERVISION & ENGINEERING	18	7,545,679	5,994,589	616,029	489,413	228,483	215,882	1,283
19	871.00	LOAD DISPATCHING	13	196,090	147,795	17,605	14,997	7,879	7,765	49
20	874.00	MAINS & SERVICES	14	16,897,282	13,395,320	1,448,097	1,031,579	516,043	502,863	3,380
21	875.00	M & R - GENERAL	13	467,159	352,103	41,942	35,728	18,770	18,500	117
22	876.00	M & R - INDUSTRIAL	17	295,774	0	11,855	54,488	122,190	107,242	0
23	878.00	METERS & HOUSE REGULATORS	23	2,644,529	2,028,592	118,369	466,786	23,801	6,611	370
24	879.00	CUSTOMER INSTALLATIONS	15	6,208,923	5,638,137	457,349	96,176	12,853	4,408	0
25	880.00	OTHER	18	6,561,473	5,212,697	535,679	425,577	198,681	187,724	1,116
26	881.00	RENTS	18	<u>417,833</u>	<u>331,943</u>	<u>34,112</u>	<u>27,101</u>	<u>12,652</u>	<u>11,954</u>	<u>71</u>
27		TOTAL DISTRIBUTION OPERATIONS		41,234,742	33,101,175	3,281,036	2,641,844	1,141,352	1,062,949	6,385
<u>DISTRIBUTION MAINTENANCE EXPENSES</u>										
28	885.00	SUPERVISION & ENGINEERING	18	70,565	56,060	5,761	4,577	2,137	2,019	12
29	886.00	STRUCTURES AND IMPROVEMENTS	13	167,094	125,941	15,002	12,779	6,714	6,617	42
30	887.00	MAINS	13	15,793,235	11,903,519	1,417,917	1,207,867	634,572	625,412	3,948
31	889.00	M & R - GENERAL	13	967,327	729,084	86,847	73,981	38,867	38,306	242
32	890.00	M & R - INDUSTRIAL	17	178,953	0	7,172	32,967	73,929	64,885	0
33	892.00	SERVICES	15	4,367,301	3,965,815	321,695	67,650	9,040	3,101	0
34	893.00	METERS & HOUSE REGULATORS	23	269,059	206,393	12,043	47,492	2,422	673	38
35	894.00	OTHER EQUIPMENT	18	<u>1,088,055</u>	<u>864,394</u>	<u>88,829</u>	<u>70,571</u>	<u>32,946</u>	<u>31,129</u>	<u>185</u>
36		TOTAL DISTRIBUTION MAINTENANCE		22,901,589	17,851,205	1,955,266	1,517,883	800,627	772,142	4,467
37		TOTAL DISTRIBUTION		<u>64,136,331</u>	<u>50,952,381</u>	<u>5,236,302</u>	<u>4,159,727</u>	<u>1,941,980</u>	<u>1,835,090</u>	<u>10,851</u>

COLUMBIA GAS OF PENNSYLVANIA, INC.  
OTHER O&M EXPENSES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1  
PAGE 8 OF 30  
WITNESS: M. P. BALMERT

LINE NO.	ACCT NO.	ACCOUNT TITLE	ALLOC FACTOR	TOTAL COMPANY	RSS/RDS	SGSS1/SCD1/SGDS1	SGSS2/SCD2/SGDS2	SDS/LGSS	LDS/LGSS	MLDS
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
				\$	\$	\$	\$	\$	\$	\$
<u>CUSTOMER ACCOUNTS EXPENSES</u>										
1	901.00	SUPERVISION	6	0	0	0	0	0	0	0
2	902.00	METER READING	6	863,552	787,335	62,703	12,219	1,088	190	17
3	903.00	CUSTOMER RECORDS AND COLLECTION EXPENS	6	10,353,303	9,439,521	751,753	146,499	13,045	2,278	207
4	903.00	INTEREST ON CUSTOMER DEPOSITS	9	97,862	70,740	24,796	2,326	0	0	0
5	903.00	RESIDENTIAL CUSTOMER PAYMENT OPTIONS		516,954	516,954	0	0	0	0	0
6	904.00	UNCOLLECTIBLES-DIS REVENUE	7	3,984,711	3,725,585	127,830	131,296	0	0	0
7	904.00	UNCOLLECTIBLES-GMB/GTS REVENUE	8	340,436	0	575	16,212	155,212	153,884	14,554
8	904.00	UNCOLLECTIBLES-UNBUNDLED GAS	Direct	1,103,635	1,010,792	44,239	48,604	0	0	0
9	904.00	DIRECT USP UNCOLLECTIBLES		10,878,013	10,878,013	0	0	0	0	0
10	905.00	MISCELLANEOUS	6	19,056	17,374	1,384	270	24	4	0
11	921.00	OFFICE SUPPLIES & EXPENSES	6	0	0	0	0	0	0	0
12		TOTAL CUSTOMER ACCOUNTS		<u>28,157,522</u>	<u>26,446,313</u>	<u>1,013,280</u>	<u>357,426</u>	<u>169,369</u>	<u>156,356</u>	<u>14,778</u>
<u>CUST SERVICE &amp; INFORMATION EXPENSES</u>										
13	907.00	SUPERVISION	6	250	228	18	4	0	0	0
14	908.00	CUSTOMER ASSISTANCE	6	696,933	635,436	50,604	9,862	878	153	0
15	908.00	DIRECT USP/LIURP/HEEP		10,781,262	10,781,262	0	0	0	0	0
16	909.00	INFORMATIONAL & INSTRUCTIONAL EXPENSES	6	233,383	212,785	16,946	3,302	294	51	5
17	910.00	MISCELLANEOUS	6	927,678	845,801	67,359	13,127	1,169	204	19
18	921.00	OFFICE SUPPLIES & EXPENSES	6	0	0	0	0	0	0	0
19	931.00	RENTS - GENERAL	6	0	0	0	0	0	0	0
20	932.00	MAINTENANCE	6	0	0	0	0	0	0	0
21		TOTAL CUST SERVICE & INFORMATION		<u>12,639,506</u>	<u>12,475,511</u>	<u>134,927</u>	<u>26,294</u>	<u>2,341</u>	<u>409</u>	<u>23</u>
<u>SALES EXPENSES</u>										
22	912.00	DEMONSTRATION	6	669,089	610,035	48,583	9,468	843	147	13
23	913.00	ADVERTISING	6	29,481	26,879	2,141	417	37	7	1
24		TOTAL SALES		<u>698,570</u>	<u>636,914</u>	<u>50,723</u>	<u>9,885</u>	<u>880</u>	<u>154</u>	<u>14</u>
<u>ADMINISTRATIVE AND GENERAL EXPENSES</u>										
25	920.00	SALARIES	19	13,351,627	10,879,573	1,072,803	756,904	332,322	307,755	2,270
26	921.00	OFFICE SUPPLIES & EXPENSES	19	2,852,186	2,324,104	229,173	161,690	70,991	65,743	485
27	922.00	ADMIN. EXPENSE TRANSFERRED	19	0	0	0	0	0	0	0
28	923.00	OUTSIDE SERVICES EMPLOYED	19	35,420,414	28,862,324	2,846,030	2,007,983	881,614	816,441	6,022
29	923.00	MULTIFAMILY HOUSE LINE REIMBURSEMENT		357,403	357,403	0	0	0	0	0
30	924.00	PROPERTY INSURANCE	19	192,093	156,527	15,435	10,890	4,781	4,428	33
31	925.00	INJURIES AND DAMAGES	19	4,020,041	3,275,731	323,010	227,896	100,059	92,662	683
32	926.00	EMPLOYEE PENSIONS & BENEFITS	24	10,876,178	8,781,317	862,807	668,015	291,590	270,817	1,631
33	928.00	REGULATORY COMMISSION EXPENSES	19	2,460,000	2,004,531	197,661	139,457	61,229	56,703	418
34	930.00	MISCELLANEOUS GENERAL	19	837,506	682,442	67,294	47,478	20,846	19,305	142
35	931.00	RENTS-GENERAL	19	4,214,959	3,434,559	338,672	238,946	104,910	97,155	717
36	932.00	MAINTENANCE	19	1,253,619	1,021,511	100,728	71,068	31,203	28,896	213
37		TOTAL ADMINISTRATIVE & GENERAL		<u>75,836,026</u>	<u>61,780,023</u>	<u>6,053,614</u>	<u>4,330,328</u>	<u>1,899,545</u>	<u>1,759,903</u>	<u>12,614</u>
38		TOTAL O & M EXPENSES		<u>306,908,296</u>	<u>243,436,583</u>	<u>27,120,760</u>	<u>25,271,649</u>	<u>6,785,234</u>	<u>3,980,954</u>	<u>313,116</u>

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**TAXES OTHER THAN INCOME TAXES**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017**

**ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND**

111, SCHEDULE 1  
PAGE 9 OF 30  
WITNESS: M. P. BALMERT

LINE NO.	ACCT NO. (A)	ACCOUNT TITLE (B)	ALLOC FACTOR (C)	TOTAL COMPANY (D)	RSS/RDS (E)	SGSS1/SCD1/SGDS1 (F)	SGSS2/SCD2/SGDS2 (G)	SDS/LGSS (H)	LDS/LGSS (I)	MLDS (J)
				\$	\$	\$	\$	\$	\$	\$
		<u>FEDERAL TAXES</u>								
1	408.00	FEDERAL/STATE UNEMPLOYMENT	24	164,608	132,903	13,058	10,110	4,413	4,099	25
2	408.00	FICA	24	<u>2,446,225</u>	<u>1,975,058</u>	<u>194,059</u>	<u>150,247</u>	<u>65,583</u>	<u>60,911</u>	<u>367</u>
3		TOTAL FEDERAL TAXES		<u>2,610,833</u>	<u>2,107,961</u>	<u>207,118</u>	<u>160,357</u>	<u>69,996</u>	<u>65,010</u>	<u>392</u>
		<u>STATE TAXES</u>								
4	408.00	PA PROPERTY TAXES	11	463,359	364,960	38,653	31,569	14,253	13,683	241
5	408.00	PA STATE UNEMPLOYMENT	24	0	0	0	0	0	0	0
6	408.00	STATE CAPITAL STOCK TAX	11	0	0	0	0	0	0	0
7	408.00	LICENSE AND FRANCHISE TAX	11	7,343	5,784	613	500	226	217	4
8	408.00	STATE SALES AND USE TAX	19	0	0	0	0	0	0	0
9	408.00	OTHER	19	<u>8,749</u>	<u>7,129</u>	<u>703</u>	<u>496</u>	<u>218</u>	<u>202</u>	<u>2</u>
10		TOTAL STATE TAXES		<u>479,451</u>	<u>377,873</u>	<u>39,969</u>	<u>32,565</u>	<u>14,697</u>	<u>14,102</u>	<u>246</u>
11		TOTAL TAXES OTHER THAN INCOME		<u>3,090,284</u>	<u>2,485,834</u>	<u>247,087</u>	<u>192,922</u>	<u>84,693</u>	<u>79,111</u>	<u>638</u>

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**RATE BASE**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017**

111, SCHEDULE 1  
PAGE 10 OF 30  
WITNESS: M. P. BALMERT

**ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND**

LINE NO.	ACCT NO. (A)	ACCOUNT TITLE (B)	ALLOC FACTOR (C)	TOTAL COMPANY (D) \$	RSS/RDS (E) \$	SGSS1/SCD1/SGDS1 (F) \$	SGSS2/SCD2/SGDS2 (G) \$	SDS/LGSS (H) \$	LDS/LGSS (I) \$	MLDS (J) \$
1	101-107	GROSS PLANT [PAGE 3]		2,211,566,200	1,741,562,748	184,703,869	150,993,812	67,954,839	65,138,050	1,212,883
2	117.00	GAS STORED UNDERGROUND - NON CURRENT	25	3,794,693	2,781,851	462,004	468,075	71,568	5,920	5,275
3	108-111	DEPRECIATION RESERVE [PAGE 4]		(421,089,299)	(335,254,616)	(33,445,437)	(29,461,975)	(11,716,425)	(10,899,790)	(311,056)
4	117.00	GAS LOST-UNDERGROUND STORAGE	25	<u>(163,467)</u>	<u>(119,836)</u>	<u>(19,902)</u>	<u>(20,164)</u>	<u>(3,083)</u>	<u>(255)</u>	<u>(227)</u>
5		NET PLANT		1,794,108,127	1,408,970,147	151,700,534	121,979,748	56,306,899	54,243,925	906,875
<u>WORKING CAPITAL</u>										
6	154.00	MATERIALS & SUPPLIES	11	738,718	581,844	61,624	50,329	22,723	21,814	384
7	164.00	GAS STORED UNDERGROUND - FSS	25	48,336,766	35,435,201	5,885,001	5,962,340	911,631	75,405	67,188
8	165.00	PREPAYMENTS	19	2,175,574	1,772,767	174,807	123,333	54,150	50,147	370
9		CASH WORKING CAPITAL - GAS PURCHASES	4	0	0	0	0	0	0	0
10		CASH WORKING CAPITAL - ALL OTHER	19	0	0	0	0	0	0	0
11		TOTAL WORKING CAPITAL		51,251,058	37,789,812	6,121,432	6,136,002	988,504	147,366	67,942
<u>DEFERRED INCOME TAXES</u>										
12	190.00	ACCUMULATED DEF INCOME TAX	12	41,598,839	32,758,254	3,474,335	2,839,953	1,278,332	1,225,086	22,879
13	282.00	ACCUMULATED DEF INCOME TAX	12	(389,606,268)	(306,807,144)	(32,539,916)	(26,598,420)	(11,972,601)	(11,473,905)	(214,283)
14	283.00	ACCUMULATED DEF INCOME TAX	12	0	0	0	0	0	0	0
15		TOTAL DEFERRED INCOME TAXES		(348,007,429)	(274,048,890)	(29,065,581)	(23,758,467)	(10,694,268)	(10,248,819)	(191,404)
16	235.00	CUSTOMER DEPOSITS	9	(3,164,548)	(2,287,494)	(801,833)	(75,221)	0	0	0
17	252.00	CUSTOMER ADVANCES	20	<u>(96,133)</u>	<u>(72,474)</u>	<u>(8,633)</u>	<u>(7,354)</u>	<u>(3,864)</u>	<u>(3,808)</u>	0
18		RATE BASE		<u>1,494,091,075</u>	<u>1,170,351,101</u>	<u>127,945,920</u>	<u>104,274,707</u>	<u>46,597,271</u>	<u>44,138,664</u>	<u>783,413</u>



COLUMBIA GAS OF PENNSYLVANIA, INC.  
STATE/FEDERAL INCOME TAXES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1  
PAGE 11 OF 30  
WITNESS: M. P. BALMERT

LINE NO.	ACCT NO. (A)	ALLOC FACTOR (B)	TOTAL COMPANY (C) \$	RSS/RDS (D) \$	SGSS1/SCD1/SGDS1 (E) \$	SGSS2/SCD2/SGDS2 (F) \$	SDS/LGSS (G) \$	LDS/LGSS (H) \$	MLDS (I) \$
<u>STATE INCOME TAX</u>									
1	OPERATING INCOME BEFORE TAXES (PG. 2, LINE 8)		120,301,333	64,737,201	11,537,549	19,727,761	11,166,027	11,833,355	1,299,440
2	STATUTORY ADJUSTMENTS	12	(153,871,920)	(121,171,060)	(12,851,383)	(10,504,836)	(4,728,484)	(4,531,528)	(84,630)
3	INTEREST ON DEBT		(35,858,186)	(28,088,426)	(3,070,702)	(2,502,593)	(1,118,334)	(1,059,328)	(18,802)
4	PA BONUS DEPRECIATION ADJUSTMENT	12	<u>76,385,438</u>	<u>60,152,005</u>	<u>6,379,712</u>	<u>5,214,834</u>	<u>2,347,325</u>	<u>2,249,551</u>	<u>42,012</u>
5	STATE TAXABLE INCOME		6,956,665	(24,370,280)	1,995,176	11,935,166	7,666,533	8,492,050	1,238,021
6	NET OPERATING LOSS DEDUCTION	12	(5,000,000)	(3,937,400)	(417,600)	(341,350)	(153,650)	(147,250)	(2,750)
	STATE TAXABLE INCOME		1,956,665	(28,307,680)	1,577,576	11,593,816	7,512,883	8,344,800	1,235,271
7	STATE NET INCOME TAX @ 9.99%		195,471	(2,827,937)	157,600	1,158,222	750,537	833,645	123,404
8	DEFERRED INCOME TAXES	12	(94,628)	(74,518)	(7,903)	(6,460)	(2,908)	(2,787)	(52)
9	STATE INCOME TAX		100,843	(2,902,455)	149,697	1,151,762	747,629	830,859	123,352
<u>FEDERAL INCOME TAX</u>									
10	OPERATING INCOME BEFORE TAXES (PG. 2, LINE 8)		120,301,333	64,737,201	11,537,549	19,727,761	11,166,027	11,833,355	1,299,440
11	STATE NET INCOME TAX (LINE 7)		(195,471)	2,827,937	(157,600)	(1,158,222)	(750,537)	(833,645)	(123,404)
12	STATUTORY ADJUSTMENTS (LINES 2 & 3)	12	(189,730,106)	(149,259,486)	(15,922,085)	(13,007,429)	(5,846,819)	(5,590,856)	(103,432)
13	FEDERAL TAXABLE INCOME		(69,624,244)	(81,694,348)	(4,542,135)	5,562,110	4,568,671	5,408,853	1,072,605
14	FEDERAL INCOME TAX @ 35%		(24,368,485)	(28,593,022)	(1,589,747)	1,946,738	1,599,035	1,893,099	375,412
15	DEFERRED INCOME TAXES	12	56,006,594	44,104,073	4,677,671	3,823,570	1,721,083	1,649,394	30,804
16	TAX REFUND AMORTIZATION	12	0	0	0	0	0	0	0
17	FLOW BACK OF EXCESS DEFERRED TAXES	12	(89,482)	(70,465)	(7,474)	(6,109)	(2,750)	(2,635)	(49)
18	EFFECT OF CNIT DEFERRED TAX ON FIT	12	<u>33,120</u>	<u>26,081</u>	<u>2,766</u>	<u>2,261</u>	<u>1,018</u>	<u>975</u>	<u>18</u>
19	FEDERAL INCOME TAX		31,581,746	15,466,667	3,083,216	5,766,461	3,318,386	3,540,833	406,184
20	STATE NET INCOME TAX (LINE 9)		<u>100,843</u>	<u>(2,902,455)</u>	<u>149,697</u>	<u>1,151,762</u>	<u>747,629</u>	<u>830,859</u>	<u>123,352</u>
21	TOTAL INCOME TAXES		<u>31,682,589</u>	<u>12,564,212</u>	<u>3,232,913</u>	<u>6,918,223</u>	<u>4,066,015</u>	<u>4,371,692</u>	<u>529,536</u>

**COLUMBIA GAS OF PENNSYLVANIA, INC.  
ALLOCATION FACTORS  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017**

**ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND**

**111, SCHEDULE 1  
PAGE 12 OF 30  
WITNESS: M. P. BALMERT**

<u>LINE NO.</u>	<u>DESCRIPTION</u> (A)	<u>ALLOC FACTOR</u> (B)	<u>TOTAL COMPANY</u> (C)	<u>RSS/RDS</u> (D)	<u>SGSS1/SCD1/SGDS1</u> (E)	<u>SGSS2/SCD2/SGDS2</u> (F)	<u>SDS/LGSS</u> (G)	<u>LDS/LGSS</u> (H)	<u>MLDS</u> (I)
1	DESIGN DAY	1	769,993,000	441,900,000	82,752,000	109,891,000	63,707,000	71,743,000	0
2	PERCENT		100.000%	57.390%	10.747%	14.272%	8.274%	9.317%	0.000%
3	THROUGHPUT EXCLUDING TRANSPORTATION	2	36,975,011	26,849,669	4,337,145	4,765,071	884,981	73,145	65,000
4	PERCENT		100.000%	72.616%	11.730%	12.887%	2.393%	0.198%	0.176%
5	THROUGHPUT EXCLUDING MDS	3	77,638,044	34,403,669	5,872,345	9,081,554	7,225,995	21,054,482	0
6	PERCENT		100.000%	44.313%	7.564%	11.697%	9.307%	27.119%	0.000%
7	GAS PURCHASED EXPENSE	4	124,134,259	90,195,150	14,478,538	16,218,817	2,742,911	226,707	272,136
8	PERCENT		100.000%	72.658%	11.664%	13.066%	2.210%	0.183%	0.219%
9	PEAK & AVERAGE MAINS	5							
10	PERCENT		100.000%	56.937%	9.542%	13.092%	7.435%	12.994%	0.000%
11	AVERAGE NO. OF CUSTOMERS	6	426,388	388,751	30,960	6,035	537	95	10
12	PERCENT		100.000%	91.174%	7.261%	1.415%	0.126%	0.022%	0.002%
13	DISTRIBUTION UNCOLLECTIBLES	7	11,699,639	10,938,832	375,282	385,525	0	0	0
14	PERCENT		100.000%	93.497%	3.208%	3.295%	0.000%	0.000%	0.000%
15	CURRENT GMB/GTS REVENUE	8	38,556,457	0	64,979	1,836,049	17,578,831	17,428,134	1,648,464
16	PERCENT		100.000%	0.000%	0.169%	4.762%	45.592%	45.202%	4.275%
17	CUSTOMER DEPOSITS	9	2,632,633	1,903,023	667,045	62,565	0	0	0
18	PERCENT		100.000%	72.285%	25.338%	2.377%	0.000%	0.000%	0.000%
19	FORFEITED DISCOUNTS	10	1,192,278	871,157	106,562	119,793	48,090	42,669	4,007
20	PERCENT		100.000%	73.067%	8.938%	10.047%	4.033%	3.579%	0.336%
21	DIST. PLANT EXCL ACCTS 375.70, 375.71, & 387	11	2,120,695,852	1,670,354,663	176,902,683	144,481,828	65,231,389	62,620,826	1,104,464
22	PERCENT		100.000%	78.764%	8.342%	6.813%	3.076%	2.953%	0.052%
23	GROSS PLANT	12	2,211,566,200	1,741,562,748	184,703,869	150,993,812	67,954,839	65,138,050	1,212,883
24	PERCENT		100.000%	78.748%	8.352%	6.827%	3.073%	2.945%	0.055%
25	MAINS - ACCOUNT 376	13	1,448,157,780	1,091,497,460	130,012,564	110,756,806	58,187,137	57,347,413	356,401
26	PERCENT		100.000%	75.371%	8.978%	7.648%	4.018%	3.960%	0.025%

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**ALLOCATION FACTORS (CONT.)**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017**

**ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND**

111, SCHEDULE 1  
PAGE 13 OF 30  
**WITNESS: M. P. BALMERT**

<u>LINE NO.</u>	<u>DESCRIPTION (A)</u>	<u>ALLOC FACTOR (B)</u>	<u>TOTAL COMPANY (C)</u>	<u>RSS/RDS (D)</u>	<u>SGSS1/SCD1/SGDS1 (E)</u>	<u>SGSS2/SCD2/SGDS2 (F)</u>	<u>SDS/LGSS (G)</u>	<u>LDS/LGSS (H)</u>	<u>MLDS (I)</u>
27	COMPOSITE DIRECT PLANT - ACCTS 376 & 380	14	1,938,540,112	1,536,763,162	166,131,224	118,352,218	59,202,147	57,695,556	395,804
28	PERCENT		100.000%	79.275%	8.570%	6.105%	3.054%	2.976%	0.020%
29	SERVICES	15	357,295,382	324,449,571	26,316,820	5,535,815	741,276	251,900	0
30	PERCENT		100.000%	90.807%	7.366%	1.549%	0.207%	0.071%	0.000%
31	METERS	16	26,466,882	19,716,446	1,065,916	5,338,167	267,092	75,039	4,221
32	PERCENT		100.000%	74.495%	4.027%	20.169%	1.009%	0.284%	0.016%
33	INDUSTRIAL M & R	17	5,159,754	0	206,786	950,547	2,131,616	1,870,805	0
34	PERCENT		100.000%	0.000%	4.008%	18.422%	41.312%	36.258%	0.000%
35	OTHER DISTRIBUTION O & M EXPENSES	18	48,452,726	38,492,697	3,955,892	3,142,489	1,467,080	1,386,382	8,185
36	PERCENT		100.000%	79.444%	8.164%	6.486%	3.028%	2.861%	0.017%
37	O & M EXCL GAS PUR, UNCOLLECTIBLES, & A & G	19	79,849,954	65,065,758	6,415,964	4,526,393	1,987,567	1,840,460	13,812
38	PERCENT		100.000%	81.485%	8.035%	5.669%	2.489%	2.305%	0.017%
39	CUSTOMER/DEMAND MAINS	20							
40	PERCENT		100.000%	75.390%	8.980%	7.650%	4.019%	3.961%	0.000%
41	HOUSE REGULATORS (GPA 383)	21	2,865,715	2,596,164	208,844	53,359	6,232	1,116	0
42	PERCENT		100.00%	90.594%	7.288%	1.862%	0.217%	0.039%	0.000%
43	AVERAGE - ALLOCATORS 5 & 20	22							
44	PERCENT		100.00%	66.163%	9.261%	10.371%	5.727%	8.478%	0.000%
45	METERS AND HOUSE REGULATORS	23	115,692,095	88,746,523	5,177,816	20,420,902	1,041,309	289,581	15,965
46	PERCENT		100.000%	76.709%	4.476%	17.651%	0.900%	0.250%	0.014%
47	LABOR	24	27,414,523	22,134,030	2,174,921	1,683,837	735,018	682,654	4,063
48	PERCENT		100.000%	80.739%	7.933%	6.142%	2.681%	2.490%	0.015%
49	SALES AND CHOICE TRANSPORTATION	25	46,929,035	34,403,669	5,713,732	5,788,507	884,981	73,145	65,000
50	PERCENT		100.000%	73.309%	12.175%	12.335%	1.886%	0.156%	0.139%

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**CUSTOMER BASED COSTS - CUSTOMER CHARGE CALCULATION WITH MAINS COMPONENT**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017**

**ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND**

**111, SCHEDULE 1  
PAGE 14 OF 30  
WITNESS: M. P. BALMERT**

LINE NO.	ACCT NO.	ACCOUNT TITLE (A)	ALLOC FACTOR (B)	TOTAL COMPANY (C) \$	RSS/RDS (D) \$	SGSS1/SCD1/SGDS1 (E) \$	SGSS2/SCD2/SGDS2 (F) \$	SDS/LGSS (G) \$	LDS/LGSS (I) \$	MLDS (J) \$
1	303.30	CUSTOMER & OTHER-BASED SOFTWARE [1]	11	19,530,136	15,382,716	1,629,204	1,330,588	600,747	576,725	10,156
2	376.00	MAINS [2]	6	671,481,432	612,216,481	48,756,267	9,501,462	846,067	147,726	13,430
3	376.00	DIRECT - MAINS - MDS [2]	Pg 3	112,456	0	0	0	0	0	112,456
4	376.08	MAINS-CSL REPLACEMENTS [2]	6	11,789,470	10,748,931	856,033	166,821	14,855	2,594	236
5	376.30	MAINS-BARE STEEL [2]	6	34,072,601	31,065,354	2,474,012	482,127	42,931	7,496	681
6	376.30	DIRECT - MAINS-BARE STEEL [2]	Pg 3	64,195	0	0	0	0	0	64,195
7	376.80	MAINS-CAST IRON [2]	6	259,251	236,370	18,824	3,668	327	57	5
8	380.00	SERVICES	15	490,342,928	445,265,703	36,118,660	7,595,412	1,015,010	348,143	0
9	380.00	DIRECT - SERVICES		39,403	0	0	0	0	0	39,403
10	380.12	CSL REPLACEMENT	15	0	0	0	0	0	0	0
11	381.00	METERS	16	37,714,590	28,095,483	1,518,767	7,606,656	380,540	107,109	6,034
12	381.10	AUTOMATIC METER READING	16	24,289,208	18,094,246	978,126	4,898,890	245,078	68,981	3,886
13	382.00	METER INSTALLATIONS	16	37,776,149	28,141,342	1,521,246	7,619,071	381,161	107,284	6,044
14	383.00	HOUSE REGULATORS	21	12,047,377	10,914,201	878,013	224,322	26,143	4,698	0
15	384.00	HOUSE REG INSTALLATIONS	21	3,864,772	3,501,252	281,665	71,962	8,387	1,507	0
16	385.00	IND M&R EQUIPMENT	17	5,047,477	0	202,303	929,846	2,085,213	1,830,114	0
17	385.00	DIRECT - IND M&R EQUIPMENT	Pg 3	373,291	0	0	0	0	0	373,291
18	385.10	IND M&R EQUIPMENT - LG VOLUME	17	1,151,820	(0)	46,165	212,188	475,840	417,627	0
19	389-398	GENERAL PLANT [1]	11	16,948,678	13,349,457	1,413,859	1,154,713	521,341	500,494	8,813
20		TOTAL GROSS PLANT		1,366,905,233	1,217,011,535	96,693,142	41,797,728	6,643,640	4,120,557	638,631
21	303.30	CUSTOMER & OTHER-BASED SOFTWARE [1]	11	6,070,503	4,781,371	506,401	413,583	186,729	179,262	3,157
22	376.00	MAINS [2]	6	81,604,532	74,402,116	5,925,305	1,154,704	102,822	17,953	1,632
23	376.00	DIRECT - MAINS - MDS [2]	Pg 4	19,215	0	0	0	0	0	19,215
24	376.08	MAINS-CSL REPLACEMENTS [2]	6	0	0	0	0	0	0	0
25	376.30	MAINS-BARE STEEL [2]	6	19,273,087	17,572,045	1,399,419	272,714	24,284	4,240	385
26	376.30	DIRECT - MAINS-BARE STEEL [2]	Pg 4	58,618	0	0	0	0	0	58,618
27	376.80	MAINS-CAST IRON [2]	6	157,046	143,185	11,403	2,222	198	35	3
28	380.00	SERVICES	15	122,253,501	111,014,736	9,005,193	1,893,707	253,065	86,800	0
29	380.00	DIRECT - SERVICES	Pg 4	24,113	0	0	0	0	0	24,113
30	380.12	CSL REPLACEMENT	15	0	0	0	0	0	0	0
31	381.00	METERS	16	16,508,949	12,298,343	664,815	3,329,690	166,575	46,885	2,641
32	381.10	AUTOMATIC METER READING	16	10,448,842	7,783,864	420,775	2,107,427	105,429	29,675	1,672
33	382.00	METER INSTALLATIONS	16	12,548,434	9,347,955	505,325	2,530,894	126,614	35,638	2,008
34	383.00	HOUSE REGULATORS	21	3,829,549	3,469,341	279,098	71,306	8,310	1,494	0
35	384.00	HOUSE REG INSTALLATIONS	21	3,044,466	2,758,104	221,881	56,688	6,606	1,187	0
36	385.00	IND M&R EQUIPMENT	17	3,180,306	0	127,467	585,876	1,313,848	1,153,115	0
37	385.00	DIRECT - IND M&R EQUIPMENT	Pg 4	85,568	0	0	0	0	0	85,568
38	385.10	IND M&R EQUIPMENT - LG VOLUME	17	0	0	0	0	0	0	0
39	389-398	GENERAL PLANT [1]	11	8,021,724	6,318,231	669,172	546,520	246,748	236,882	4,171
40		TOTAL DEPRECIATION RESERVE		287,128,453	249,889,291	19,736,254	12,965,331	2,541,228	1,793,166	203,183

[1] CUSTOMER PORTION OF DISTRIBUTION PLANT @ 61.945% (PAGE 17)

[2] CUSTOMER PORTION OF MAINS @ 49.565% (PAGE 17)

COLUMBIA GAS OF PENNSYLVANIA, INC.  
**CUSTOMER BASED COSTS - CUSTOMER CHARGE CALCULATION WITH MAINS COMPONENT**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017**

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1  
PAGE 15 OF 30  
WITNESS: M. P. BALMERT

LINE NO.	ACCT NO.	ACCOUNT TITLE (A)	ALLOC FACTOR (B)	TOTAL COMPANY (C) \$	RSS/RDS (D) \$	SGSS1/SCD1/SGDS1 (E) \$	SGSS2/SCD2/SGDS2 (F) \$	SDS/LGSS (G) \$	LDS/LGSS (I) \$	MLDS (J) \$
1	154.00	CUSTOMER BASED MATERIALS & SUPPLIES	Pg 22	463,437	413,922	32,622	13,694	1,923	1,060	216
2	190-282-283	CUSTOMER BASED DEFERRED INCOME TAXES	Pg 22	(215,093,347)	(191,506,388)	(15,215,430)	(6,577,203)	(1,045,429)	(648,402)	(100,494)
3	235.00	CUSTOMER DEPOSITS	9	(3,164,548)	(2,287,494)	(801,833)	(75,221)	0	0	0
4	252.00	CUSTOMER BASED ADVANCES	Pg 22	(60,309)	(53,865)	(4,245)	(1,782)	(250)	(138)	(28)
5	TOTAL CUSTOMER-BASED RATE BASE			861,922,013	773,688,420	60,968,002	22,191,884	3,058,656	1,679,911	335,141
6	EQUITY CAPITAL @ 52.310%			450,871,405	404,716,412	31,892,362	11,608,575	1,599,983	878,762	175,312
7	RETURN ON RATE BASE @ 8.150%			70,246,644	63,055,606	4,968,892	1,808,639	249,280	136,913	27,314
8	RETURN ON EQUITY @ 11.000%			49,595,855	44,518,805	3,508,160	1,276,943	175,998	96,664	19,284
9	303.30	CUSTOMER & OTHER-BASED SOFTWARE [1]	11	2,941,278	2,316,669	245,361	200,389	90,474	86,856	1,529
10	376.00	MAINS [2]	6	13,872,595	12,648,201	1,007,289	196,297	17,479	3,052	277
11	376.00	DIRECT - MAINS - MDS [2]		2,080	0	0	0	0	0	2,080
12	376.08	MAINS-CSL REPLACEMENTS [2]	6	0	0	0	0	0	0	0
13	376.30	MAINS-BARE STEEL [2]	6	923,288	841,799	67,040	13,065	1,163	203	18
14	376.30	DIRECT - MAINS-BARE STEEL [2]		1,580	0	0	0	0	0	1,580
15	376.80	MAINS-CAST IRON [2]	6	6,951	6,337	505	98	9	2	0
16	380.00	SERVICES	15	13,906,289	12,627,885	1,024,337	215,408	28,786	9,873	0
17	380.00	DIRECT - SERVICES		1,028	0	0	0	0	0	1,028
18	380.12	CSL REPLACEMENT	15	0	0	0	0	0	0	0
19	381.00	METERS	16	913,408	680,444	36,783	184,225	9,216	2,594	146
20	381.10	AUTOMATIC METER READING	16	1,743,495	1,298,815	70,211	351,646	17,592	4,952	279
21	382.00	METER INSTALLATIONS	16	732,417	545,615	29,494	147,721	7,390	2,080	117
22	383.00	HOUSE REGULATORS	21	313,185	283,726	22,825	5,832	680	122	0
23	384.00	HOUSE REG INSTALLATIONS	21	64,393	58,336	4,693	1,199	140	25	0
24	385.00	IND M&R EQUIPMENT	17	213,714	1	8,566	39,370	88,289	77,488	0
25	385.00	DIRECT - IND M&R EQUIPMENT		13,396	0	0	0	0	0	13,396
26	385.10	IND M&R EQUIPMENT - LG VOLUME	17	0	0	0	0	0	0	0
27	389-398	GENERAL PLANT [3]	11	865,152	681,428	72,171	58,943	26,612	25,548	450
28	TOTAL DEPRECIATION EXPENSES			36,514,249	31,989,256	2,589,275	1,414,193	287,830	212,795	20,901
29	TOTAL NET SALVAGE AMORTIZED [3]			2,799,163	2,204,733	233,506	190,707	86,102	82,659	1,456
30	TOTAL DEPRECIATION & AMORTIZATION EXPENSES			39,313,412	34,193,989	2,822,781	1,604,900	373,932	295,454	22,357

[1] INTANGIBLE PLANT @ 61.945% OF GROSS PLANT, DEPRECIATION RESERVE, & DEPRECIATION EXPENSES. (PAGE 17)

[2] MAINS @ 49.565% OF GROSS PLANT, DEPRECIATION RESERVE, & DEPRECIATION EXPENSES. (PAGE 17)

[3] GENERAL PLANT & NET SALVAGE @ 61.945% OF GROSS PLANT, DEPRECIATION RESERVE, & DEPRECIATION EXPENSES. (PAGE 17)

COLUMBIA GAS OF PENNSYLVANIA, INC.  
 CUSTOMER BASED COSTS - CUSTOMER CHARGE CALCULATION WITH MAINS COMPONENT  
 FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017

ALLOCATED COST OF SERVICE  
 CUSTOMER/DEMAND

111, SCHEDULE 1  
 PAGE 16 OF 30  
 WITNESS: M. P. BALMERT

LINE NO.	ACCT NO. (A)	ACCOUNT TITLE (B)	ALLOC FACTOR (C)	TOTAL COMPANY (D)	RSS/RDS (E)	SGSS1/SCD1/SGDS1 (F)	SGSS2/SCD2/SGDS2 (G)	SDS/LGSS (H)	LDS/LGSS (I)	MLDS (J)
				\$	\$	\$	\$	\$	\$	\$
1	870.00	SUPERVISION & ENGINEERING [5]	Pg 21	5,222,270	4,609,719	367,837	167,917	44,362	31,689	746
2	874.00	MAINS & SERVICES [1]	Pg 18	10,530,893	9,584,033	768,999	154,713	16,729	4,411	2,008
3	876.00	M & R - INDUSTRIAL	17	295,774	0	11,855	54,487	122,190	107,242	0
4	878.00	METERS & HOUSE REGULATORS	23	2,644,529	2,028,592	118,369	466,786	23,801	6,611	370
5	879.00	CUSTOMER INSTALLATIONS	15	6,208,923	5,638,138	457,349	96,176	12,852	4,408	0
6	880.00	OTHER [5]	Pg 21	4,541,115	4,008,459	319,859	146,016	38,576	27,556	649
7	885.00	SUPERVISION & ENGINEERING [5]	Pg 21	48,837	43,109	3,440	1,570	415	296	7
8	887.00	MAINS [2]	13	7,827,917	7,135,268	568,245	110,738	9,861	1,722	2,083
9	890.00	M & R - INDUSTRIAL	17	178,953	0	7,172	32,967	73,929	64,885	0
10	892.00	SERVICES	15	4,367,301	3,965,816	321,695	67,649	9,040	3,101	0
11	893.00	METERS & HOUSE REGULATORS	23	269,059	206,391	12,043	47,492	2,422	673	38
12	894.00	OTHER EQUIPMENT [5]	Pg 21	<u>753,030</u>	<u>664,702</u>	<u>53,041</u>	<u>24,213</u>	<u>6,397</u>	<u>4,569</u>	<u>108</u>
13		TOTAL DISTRIBUTION		37,666,331	33,274,508	2,642,067	1,202,807	316,212	225,474	5,263
14	901.00	SUPERVISION	6	0	0	0	0	0	0	0
15	902.00	METER READING	6	863,552	787,335	62,703	12,219	1,088	190	17
16	903.00	CUSTOMER RECORDS AND COLLECTION EXPENS	6	10,353,303	9,439,521	751,753	146,499	13,045	2,278	207
17	903.00	INTEREST ON CUSTOMER DEPOSITS	9	97,862	70,740	24,796	2,326	0	0	0
18	904.00	UNCOLLECTIBLES-DIS REVENUE	7	3,984,711	3,725,585	127,830	131,296	0	0	0
19	904.00	UNCOLLECTIBLES-GMB/GTS REVENUE	8	340,436	(1)	575	16,212	155,212	153,884	14,554
20	905.00	MISCELLANEOUS	6	19,056	17,374	1,384	270	24	4	0
21	921.00	OFFICE SUPPLIES & EXPENSES	6	0	0	0	0	0	0	0
22		TOTAL CUSTOMER ACCOUNTS		15,658,920	14,040,554	969,041	308,822	169,369	156,356	14,778
23	907.00	SUPERVISION	6	250	228	18	4	0	0	0
24	908.00	CUSTOMER ASSISTANCE	6	696,933	635,422	50,604	9,862	878	153	14
25	909.00	INFORMATIONAL & INSTRUCTIONAL EXPENSES	6	233,383	212,785	16,946	3,302	294	51	5
26	910.00	MISCELLANEOUS	6	927,678	845,800	67,359	13,127	1,169	204	19
27	921.00	OFFICE SUPPLIES & EXPENSES	6	0	0	0	0	0	0	0
28	931.00	RENTS - GENERAL	6	0	0	0	0	0	0	0
29	932.00	MAINTENANCE	6	0	0	0	0	0	0	0
30		TOTAL CUST SERVICE & INFORMATION		1,858,244	1,694,235	134,927	26,295	2,341	408	38
31	912.00	DEMONSTRATION	6	669,089	610,035	48,583	9,468	843	147	13
32	913.00	ADVERTISING	6	29,481	26,879	2,141	417	37	6	1
33		TOTAL SALES		698,570	636,914	50,724	9,885	880	153	14
34	920-931	CUSTOMER-RELATED A&G [3]		35,598,947	29,000,778	2,841,687	2,032,742	891,684	826,134	5,921
35		TOTAL CUST-RELATED O&M [LINES 13, 21, 30, 33 & 34]		91,481,011	78,646,989	6,638,446	3,580,551	1,380,486	1,208,525	26,014
36		DEPRECIATION & AMORTIZATION EXPENSE [PAGE 15, LINE 30]		39,313,413	34,193,989	2,822,781	1,604,900	373,932	295,454	22,357
37		INCOME TAXES		35,173,965	31,573,262	2,488,028	905,623	124,820	68,555	13,676
38		RETURN ON RATE BASE [PAGE 15, LINE 7]		70,246,644	63,055,606	4,968,892	1,808,639	249,280	136,913	27,314
39		TOTAL ANNUAL CUSTOMER-BASED COST		<u>236,215,033</u>	<u>207,469,846</u>	<u>16,918,147</u>	<u>7,899,713</u>	<u>2,128,518</u>	<u>1,709,447</u>	<u>89,361</u>
40		AVERAGE ANNUAL CUSTOMER BILLS [4]		5,188,635	4,734,841	373,476	72,588	6,468	1,142	120
41		MONTHLY SYSTEM BASED CHARGE/BILL		<u>\$ 45.53</u>	<u>\$ 43.82</u>	<u>\$ 45.30</u>	<u>\$ 108.83</u>	<u>\$ 329.08</u>	<u>\$ 1,496.89</u>	<u>\$ 744.67</u>

[1] MAINS AND SERVICES @ 62.323% OF TOTAL ACCOUNT 874. (PAGE 18)

[5] CUSTOMER-RELATED (SEE WORKPAPER).

[2] MAINS @ 49.565% OF ACCOUNT 887. (PAGE 17)

[3] CUSTOMER-RELATED A&G @ 46.942% OF A&G (PAGE 20).

[4] AVERAGE ANNUAL CUSTOMER BILLS INCLUDE FINAL BILLS (ALLOCATION FACTOR 6 DETAIL).

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**CUSTOMER BASED COSTS - CUSTOMER CHARGE CALCULATION WITH MAINS COMPONENT - INTANGIBLE AND GENERAL PLANT**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017**

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1  
PAGE 17 OF 30  
WITNESS: M. P. BALMERT

LINE NO.	ACCT NO. (A)	ACCOUNT TITLE (B)	ALLOC FACTOR (C)	TOTAL COMPANY (D) \$	RSS/RDS (E) \$	SGSS1/SCD1/SGDS1 (F) \$	SGSS2/SCD2/SGDS2 (G) \$	SDS/LGSS (H) \$	LDS/LGSS (I) \$	MLDS (J) \$
1		TOTAL GROSS PLANT LESS GENERAL PLANT [1]		2,147,741,511						
2		LOW PRESSURE - ALL PIPE	Alloc 20	217,400,280.62						
3		REGULATED PRESSURE - ALL PIPE	Alloc 20	437,093,802.03						
4		REMAINING REGULATED PRESSURE - ALL PIPE	Alloc 20	195,480,163.44						
5		TRANSMISSION - ALL PIPE	Alloc 20	<u>11,960,980.31</u>						
6		TOTAL		861,935,226.40						
7		LOW PRESSURE Unit Cost of 2" x All Pipe Footage	Alloc 20	101,315,288.36						
8		REGULATED PRESSURE Unit Cost of 2" x All Pipe Footage	Alloc 20	245,435,041.50						
9		REMAINING REGULATED PRESSURE Unit Cost of 2" x All Pipe Fo	Alloc 20	80,469,941.15						
10		TRANSMISSION Unit Cost of 2" x All Pipe Footage	Alloc 20	<u>0.00</u>						
11		TOTAL		427,220,271.01						
12		CUSTOMER COMPONENT-MAINS [2]:		49.565%						
13	376.00	MAINS [2]	Pg 14	671,481,432						
14	376.00	DIRECT - MAINS - MDS [2]	Pg 14	112,456						
15	376.08	MAINS-CSL REPLACEMENTS [2]	Pg 14	11,789,470						
16	376.30	MAINS-BARE STEEL [2]	Pg 14	34,072,601						
17	376.30	DIRECT - MAINS-BARE STEEL [2]	Pg 14	64,195						
18	376.80	MAINS-CAST IRON [2]	Pg 14	259,251						
19	380.00	SERVICES	Pg 14	490,342,928						
20	380.00	DIRECT - SERVICES	Pg 14	39,403						
21	380.12	CSL REPLACEMENT	Pg 14	-						
22	381.00	METERS	Pg 14	37,714,590						
23	381.10	AUTOMATIC METER READING	Pg 14	24,289,208						
24	382.00	METER INSTALLATIONS	Pg 14	37,776,149						
25	383.00	HOUSE REGULATORS	Pg 14	12,047,377						
26	384.00	HOUSE REG INSTALLATIONS	Pg 14	3,864,772						
27	385.00	IND M&R EQUIPMENT	Pg 14	5,047,477						
28	385.00	DIRECT - IND M&R EQUIPMENT	Pg 14	373,291						
29	385.10	IND M&R EQUIPMENT - LG VOLUME	Pg 14	<u>1,151,820</u>						
30		CUSTOMER-RELATED GROSS PLANT		1,330,426,419						
31		GENERAL PLANT	Pg 3	27,360,850						
32		GENERAL PLANT CUSTOMER-RELATED COSTS PCT [Line 30 / Line 1]		<u>61.945%</u>						
33		CUSTOMER-RELATED GENERAL PLANT		<u>16,948,678</u>						
34		INTANGIBLE PLANT [ACCOUNT 303.3 ONLY]	Pg 3	31,528,188						
35		INTANGIBLE PLANT CUSTOMER-RELATED COSTS PCT [Line 30 / Line 1]		<u>61.945%</u>						
36		CUSTOMER-RELATED INTANGIBLE PLANT		<u>19,530,136</u>						

[1] Exhibit 111, Schedule 3, Page 3, Line 51, less Page 3, Line 50.  
[2] Customer Component of Allocation Factor 20 - Minimum System Mains.

COLUMBIA GAS OF PENNSYLVANIA, INC.  
 CUSTOMER BASED COSTS - CUSTOMER CHARGE CALCULATION WITH MAINS COMPONENT - ACCOUNTS 874 & 887  
 FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017

111, SCHEDULE 1

PAGE 18 OF 30

WITNESS: M. P. BALMERT

ALLOCATED COST OF SERVICE  
 CUSTOMER/DEMAND

LINE NO.	ACCT NO.	ACCOUNT TITLE	ALLOC FACTOR	TOTAL COMPANY	RSS/RDS	SGSS1/SCD1/SGDS1	SGSS2/SCD2/SGDS2	SDS/LGSS	LDS/LGSS	MLDS
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
				\$	\$	\$	\$	\$	\$	\$
				TOTAL PLANT	CUSTOMER COMPONENT	CUSTOMER-RELATED				
1	376.00	MAINS	Pg 3	1,354,749,181						
2	376.00	DIRECT - MAINS - MDS	Pg 3	226,885						
3	376.08	MAINS-CSL REPLACEMENTS	Pg 3	23,785,876						
4	376.30	MAINS-BARE STEEL	Pg 3	68,743,268						
5	376.30	DIRECT - MAINS-BARE STEEL	Pg 3	129,516						
6	376.80	MAINS-CAST IRON	Pg 3	523,053						
7		TOTAL MAINS		1,448,157,780	49.565%	717,779,404				
8	380.00	SERVICES	Pg 3	490,342,928						
9	380.12	CSL REPLACEMENT	Pg 3	0						
10		TOTAL SERVICES		490,342,928	100.000%	490,342,928				
11		TOTAL MAINS AND SERVICES		1,938,500,708	62.323%	1,208,122,332				
12		TOTAL ACCOUNT 874	Pg 7					16,897,282		
13		PERCENTAGE CUSTOMER-RELATED (Line 12)						62.323%		
14		CUSTOMER-RELATED ACCOUNT 874						10,530,893		
LINE NO.	DESCRIPTION	TOTAL COMPANY	RSS/RDS	SGSS1/SCD1/SGDS1	SGSS2/SCD2/SGDS2	SDS/LGSS	LDS/LGSS	MLDS		
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)		
15	Customer Based Mains	717,779,405	654,267,136	52,105,136	10,154,078	904,180	157,873	191,003		
16	Services	490,382,332	445,265,703	36,118,660	7,595,412	1,015,010	348,143	39,403		
17	Total Customer Based Mains and Services	1,208,161,737	1,099,532,839	88,223,796	17,749,490	1,919,189	506,016	230,406		
		100.000%	91.009%	7.302%	1.469%	0.159%	0.042%	0.019%		
18	Account 874	Line 14	10,530,893							
19	CUSTOMER BASED ACCOUNT 874		10,530,893	9,584,033	768,999	154,713	16,729	4,411	2,008	



COLUMBIA GAS OF PENNSYLVANIA, INC.  
 CUSTOMER BASED COSTS - CUSTOMER CHARGE CALCULATION WITH MAINS COMPONENT  
 FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017

ALLOCATED COST OF SERVICE  
 CUSTOMER/DEMAND

111, SCHEDULE 1

PAGE 19 OF 30

WITNESS: M. P. BALMERT

LINE NO.	ACCT NO. (A)	ACCOUNT TITLE (B)	ALLOC FACTOR (C)	TOTAL COMPANY (D) \$	RSS/RDS (E) \$	SGSS1/SCD1/SGDS1 (F) \$	SGSS2/SCD2/SGDS2 (G) \$	SDS/LGSS (H) \$	LDS/LGSS (I) \$	MLDS (J) \$
1		TOTAL ACCOUNT 887	Pg 7	15,793,235						
2		PERCENTAGE CUSTOMER-RELATED	Pg 18	49.565%						
3		<b>CUSTOMER-RELATED ACCOUNT 887</b>		7,827,917						
4		Total Customer Based Mains	Pg 18	717,779,405	654,267,136	52,105,136	10,154,078	904,180	157,873	191,003
				100.000%	91.152%	7.259%	1.415%	0.126%	0.022%	0.027%
5		Account 887		7,827,917						
6		CUSTOMER BASED ACCOUNT 887		7,827,917	7,135,268	568,245	110,738	9,861	1,722	2,083

COLUMBIA GAS OF PENNSYLVANIA, INC.  
**CUSTOMER BASED COSTS - CUSTOMER CHARGE CALCULATION WITH MAINS COMPONENT - A&G EXPENSE**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017**

111, SCHEDULE 1  
 PAGE 20 OF 30  
 WITNESS: M. P. BALMERT

ALLOCATED COST OF SERVICE  
 CUSTOMER/DEMAND

LINE NO.	ACCT NO. (A)	ACCOUNT TITLE (B)	ALLOC FACTOR (C)	TOTAL COMPANY (D) \$	RSS/RDS (E) \$	SGSS1/SCD1/SGDS1 (F) \$	SGSS2/SCD2/SGDS2 (G) \$	SDS/LGSS (H) \$	LDS/LGSS (I) \$	MLDS (J) \$
1		TOTAL O & M LESS GAS PURCHASED COST AND A&G	Pg 7/8	106,938,011						
2	874.00	MAINS & SERVICES	Pg 16	10,530,893						
3	876.00	M & R - INDUSTRIAL	Pg 16	295,774						
4	878.00	METERS & HOUSE REGULATORS	Pg 16	2,644,529						
5	879.00	CUSTOMER INSTALLATIONS	Pg 16	6,208,923						
6	887.00	MAINS	Pg 16	7,827,917						
7	890.00	M & R - INDUSTRIAL	Pg 16	178,953						
8	892.00	SERVICES	Pg 16	4,367,301						
9	893.00	METERS & HOUSE REGULATORS	Pg 16	269,059						
10	901.00	SUPERVISION	Pg 16	0						
11	902.00	METER READING	Pg 16	863,552						
12	903.00	CUSTOMER RECORDS AND COLLECTION EXPENSES	Pg 16	10,353,303						
13	903.00	INTEREST ON CUSTOMER DEPOSITS	Pg 16	97,862						
14	904.00	UNCOLLECTIBLES-DIS REVENUE	Pg 16	3,984,711						
15	905.00	MISCELLANEOUS	Pg 16	19,056						
16	921.00	OFFICE SUPPLIES & EXPENSES	Pg 16	0						
17	907.00	SUPERVISION	Pg 16	250						
18	908.00	CUSTOMER ASSISTANCE	Pg 16	696,933						
19	909.00	INFORMATIONAL & INSTRUCTIONAL EXPENSES	Pg 16	233,383						
20	910.00	MISCELLANEOUS	Pg 16	927,678						
21	921.00	OFFICE SUPPLIES & EXPENSES	Pg 16	0						
22	931.00	RENTS - GENERAL	Pg 16	0						
23	932.00	MAINTENANCE	Pg 16	0						
24	912.00	DEMONSTRATION	Pg 16	669,089						
25	913.00	ADVERTISING	Pg 16	29,481						
26		CUSTOMER-RELATED O&M LESS A&G		50,198,647						
27		ADMINISTRATIVE & GENERAL	Pg 8	75,836,026						
28		A&G CUSTOMER-RELATED COSTS PCT [Line 27 / Line 1]		46.94%						
29		<b>CUSTOMER-RELATED A&amp;G</b>		<b>35,598,947</b>						

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**CUSTOMER BASED COSTS - CUSTOMER CHARGE CALCULATION WITH MAINS COMPONENT - ACCOUNTS 870, 880, 885, 894**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017**

**ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND**

**111, SCHEDULE 1  
PAGE 21 OF 30  
WITNESS: M. P. BALMERT**

LINE NO.	ACCT NO.	ACCOUNT TITLE	ALLOC FACTOR	TOTAL COMPANY	RSS/RDS	SGSS1/SCD1/SGDS1	SGSS2/SCD2/SGDS2	SDS/LGSS	LDS/LGSS	MLDS
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
				\$	\$	\$	\$	\$	\$	\$
1		CUSTOMER COMPONENT EXPENSES								
2	874.00	MAINS & SERVICES	Pg 16	10,530,893	9,584,033	768,999	154,713	16,729	4,411	2,008
3	876.00	M & R - INDUSTRIAL	Pg 16	295,774	0	11,855	54,487	122,190	107,242	0
4	878.00	METERS & HOUSE REGULATORS	Pg 16	2,644,529	2,028,592	118,369	466,786	23,801	6,611	370
5	879.00	CUSTOMER INSTALLATIONS	Pg 16	6,208,923	5,638,138	457,349	96,176	12,852	4,408	0
6	887.00	MAINS	Pg 16	7,827,917	7,135,268	568,245	110,738	9,861	1,722	2,083
7	890.00	M & R - INDUSTRIAL	Pg 16	178,953	0	7,172	32,967	73,929	64,885	0
8	892.00	SERVICES	Pg 16	4,367,301	3,965,816	321,695	67,649	9,040	3,101	0
9	893.00	METERS & HOUSE REGULATORS	Pg 16	269,059	206,391	12,043	47,492	2,422	673	38
10		TOTAL		32,323,349	28,558,238	2,265,727	1,031,008	270,824	193,053	4,499
11		TOTAL COMPANY EXPENSES								
12	874.00	MAINS & SERVICES	Pg 7	16,897,282	13,395,320	1,448,097	1,031,579	516,043	502,863	3,380
13	876.00	M & R - INDUSTRIAL	Pg 7	295,774	0	11,855	54,488	122,190	107,242	0
14	878.00	METERS & HOUSE REGULATORS	Pg 7	2,644,529	2,028,592	118,369	466,786	23,801	6,611	370
15	879.00	CUSTOMER INSTALLATIONS	Pg 7	6,208,923	5,638,137	457,349	96,176	12,853	4,408	0
16	887.00	MAINS	Pg 7	15,793,235	11,903,519	1,417,917	1,207,867	634,572	625,412	3,948
17	890.00	M & R - INDUSTRIAL	Pg 7	178,953	0	7,172	32,967	73,929	64,885	0
18	892.00	SERVICES	Pg 7	4,367,301	3,965,815	321,695	67,650	9,040	3,101	0
19	893.00	METERS & HOUSE REGULATORS	Pg 7	269,059	206,393	12,043	47,492	2,422	673	38
20		TOTAL		46,655,056	37,137,775	3,794,498	3,005,003	1,394,850	1,315,195	7,736
21		PERCENTAGE CUSTOMER RELATED (LINE 11 / LINE 21)		69.282%	76.898%	59.711%	34.310%	19.416%	14.679%	58.159%
22		TOTAL COMPANY EXPENSES								
23	870.00	SUPERVISION & ENGINEERING	Pg 7	7,545,679	5,994,589	616,029	489,413	228,483	215,882	1,283
24		PERCENTAGE CUSTOMER RELATED			76.898%	59.711%	34.310%	19.416%	14.679%	58.159%
25	870.00	SUPERVISION & ENGINEERING CUSTOMER RELATED		5,222,270	4,609,719	367,837	167,917	44,362	31,689	746
26	880.00	OTHER	Pg 7	6,561,473	5,212,697	535,679	425,577	198,681	187,724	1,116
27		PERCENTAGE CUSTOMER RELATED			76.898%	59.711%	34.310%	19.416%	14.679%	58.159%
28	880.00	OTHER CUSTOMER RELATED		4,541,115	4,008,459	319,859	146,016	38,576	27,556	649
29	885.00	SUPERVISION & ENGINEERING	Pg 7	70,565	56,060	5,761	4,577	2,137	2,019	12
30		PERCENTAGE CUSTOMER RELATED			76.898%	59.711%	34.310%	19.416%	14.679%	58.159%
31	885.00	SUPERVISION & ENGINEERING CUSTOMER RELATED		48,837	43,109	3,440	1,570	415	296	7
32	894.00	OTHER EQUIPMENT	Pg 7	1,088,055	864,394	88,829	70,571	32,946	31,129	185
33		PERCENTAGE CUSTOMER RELATED			76.898%	59.711%	34.310%	19.416%	14.679%	58.159%
34	894.00	OTHER EQUIPMENT CUSTOMER RELATED		753,030	664,702	53,041	24,213	6,397	4,569	108

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**CUSTOMER BASED COSTS - CUSTOMER CHARGE CALCULATION WITH MAINS COMPONENT - OTHER RATE BASE ITEMS**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017**

111, SCHEDULE 1  
PAGE 22 OF 30  
WITNESS: M. P. BALMERT

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

<u>LINE NO.</u>	<u>ACCT NO.</u> (A)	<u>ACCOUNT TITLE</u> (B)	<u>ALLOC FACTOR</u> (C)	<u>TOTAL COMPANY</u> (D)	<u>RSS/RDS</u> (E)	<u>SGSS1/SCD1/SGDS1</u> (F)	<u>SGSS2/SCD2/SGDS2</u> (G)	<u>SDS/LGSS</u> (H)	<u>LDS/LGSS</u> (I)	<u>MLDS</u> (J)
1		Total Gross Plant	Pg 12	2,211,566,200	1,741,562,748	184,703,869	150,993,812	67,954,839	65,138,050	1,212,883
2		Customer Based Gross Plant	Pg 14	1,366,905,233	1,217,011,535	96,693,142	41,797,728	6,643,640	4,120,557	638,631
3		Percent		100.000%	89.034%	7.074%	3.058%	0.486%	0.301%	0.047%
4		Customer Based Gross Plant to Total Gross Plant		61.807%						
5		Total Deferred Income Taxes	Pg 10	(348,007,429)						
6		<b>CUSTOMER BASED DEFFERED INCOME TAXES</b>		<b>(215,093,347)</b>	<b>(191,506,388)</b>	<b>(15,215,430)</b>	<b>(6,577,203)</b>	<b>(1,045,429)</b>	<b>(648,402)</b>	<b>(100,494)</b>
7		DIST. PLANT EXCL ACCTS 375.70, 375.71, & 387	Pg 12	2,120,695,852	1,670,354,663	176,902,683	144,481,828	65,231,389	62,620,826	1,104,464
8		Customer Based Dist Plant Excl 375.7, 375.71.387	Pg 14	1,330,426,419	1,188,279,362	93,650,080	39,312,426	5,521,552	3,043,338	619,662
9		Percent		100.000%	89.316%	7.039%	2.955%	0.415%	0.229%	0.047%
10		Customer Based Gross Plant to Dist Plant Excl 375.7, 375.71.387		62.735%						
11		Materials & Supplies		738,718						
12		<b>CUSTOMER BASED MATERIALS &amp; SUPPLIES</b>		<b>463,437</b>	<b>413,922</b>	<b>32,622</b>	<b>13,694</b>	<b>1,923</b>	<b>1,060</b>	<b>216</b>
13		DIST. PLANT EXCL ACCTS 375.70, 375.71, & 387	Pg 12	2,120,695,852	1,670,354,663	176,902,683	144,481,828	65,231,389	62,620,826	1,104,464
14		Customer Based Dist Plant Excl 375.7, 375.71.387		1,330,426,419	1,188,279,362	93,650,080	39,312,426	5,521,552	3,043,338	619,662
15		Percent		100.000%	89.316%	7.039%	2.955%	0.415%	0.229%	0.047%
16		Customer Based Gross Plant to Dist Plant Excl 375.7, 375.71.387		62.735%						
17		Customer Advances	Pg 10	(96,133)						
18		<b>CUSTOMER BASED ADVANCES</b>		<b>(60,309)</b>	<b>(53,865)</b>	<b>(4,245)</b>	<b>(1,782)</b>	<b>(250)</b>	<b>(138)</b>	<b>(28)</b>

COLUMBIA GAS OF PENNSYLVANIA, INC.  
 CUSTOMER BASED COSTS - CUSTOMER CHARGE CALCULATION EXCLUDING MAINS  
 FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017

ALLOCATED COST OF SERVICE  
 CUSTOMER/DEMAND

111, SCHEDULE 1  
 PAGE 23 OF 30  
 WITNESS: M. P. BALMERT

LINE NO.	ACCT NO.	ACCOUNT TITLE (A)	ALLOC FACTOR (B)	TOTAL COMPANY (C) \$	RSS/RDS (D) \$	SGSS1/SCD1/SGDS1 (E) \$	SGSS2/SCD2/SGDS2 (F) \$	SDS/LGSS (G) \$	LDS/LGSS (I) \$	MLDS (J) \$
1	303.30	CUSTOMER & OTHER-BASED SOFTWARE [1]	11	8,993,416	7,083,574	750,231	612,721	276,637	265,576	4,677
2	380.00	SERVICES	15	490,342,928	445,265,703	36,118,660	7,595,412	1,015,010	348,143	0
3	380.00	DIRECT - SERVICES	Pg 14	39,403	0	0	0	0	0	39,403
4	380.12	CSL REPLACEMENT	15	0	0	0	0	0	0	0
5	381.00	METERS	16	37,714,590	28,095,484	1,518,767	7,606,656	380,540	107,109	6,034
6	381.10	AUTOMATIC METER READING	16	24,289,208	18,094,247	978,126	4,898,890	245,078	68,981	3,886
7	382.00	METER INSTALLATIONS	16	37,776,149	28,141,343	1,521,246	7,619,071	381,161	107,284	6,044
8	383.00	HOUSE REGULATORS	21	12,047,377	10,914,201	878,013	224,322	26,143	4,698	0
9	384.00	HOUSE REG INSTALLATIONS	21	3,864,772	3,501,251	281,665	71,962	8,387	1,507	0
10	385.00	IND M&R EQUIPMENT	17	5,047,477	1	202,303	929,846	2,085,213	1,830,114	0
11	385.00	DIRECT - IND M&R EQUIPMENT		373,291	0	0	0	0	0	373,291
12	385.10	IND M&R EQUIPMENT - LG VOLUME	17	<u>1,151,820</u>	<u>0</u>	<u>46,165</u>	<u>212,188</u>	<u>475,840</u>	<u>417,627</u>	<u>0</u>
13		TOTAL GROSS PLANT		621,640,430	541,095,804	42,295,176	29,771,068	4,894,009	3,151,039	433,335
14	303.30	CUSTOMER & OTHER-BASED SOFTWARE [1]	11	2,795,401	2,201,769	233,192	190,451	85,987	82,548	1,454
15	380.00	SERVICES	15	122,253,501	111,014,736	9,005,193	1,893,707	253,065	86,800	0
16	380.00	DIRECT - SERVICES	Pg 14	24,113	0	0	0	0	0	24,113
17	380.12	CSL REPLACEMENT	15	0	0	0	0	0	0	0
18	381.00	METERS	16	16,508,949	12,298,343	664,815	3,329,690	166,575	46,885	2,641
19	381.10	AUTOMATIC METER READING	16	10,448,842	7,783,864	420,775	2,107,427	105,429	29,675	1,672
20	382.00	METER INSTALLATIONS	16	12,548,434	9,347,955	505,325	2,530,894	126,614	35,638	2,008
21	383.00	HOUSE REGULATORS	21	3,829,549	3,469,341	279,098	71,306	8,310	1,494	0
22	384.00	HOUSE REG INSTALLATIONS	21	3,044,466	2,758,104	221,881	56,688	6,606	1,187	0
23	385.00	IND M&R EQUIPMENT	17	3,180,306	0	127,467	585,876	1,313,848	1,153,115	0
24	385.00	DIRECT - IND M&R EQUIPMENT	Pg 14	85,568	0	0	0	0	0	85,568
25	385.10	IND M&R EQUIPMENT - LG VOLUME	17	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
26		TOTAL DEPRECIATION RESERVE		174,719,129	148,874,112	11,457,746	10,766,039	2,066,434	1,437,342	117,457

[1] INTANGIBLE PLANT @ 28.525% OF TOTAL REPRESENTING CUSTOMER PORTION (PAGE 26)

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**CUSTOMER BASED COSTS - CUSTOMER CHARGE CALCULATION EXCLUDING MAINS**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017**

111, SCHEDULE 1  
PAGE 24 OF 30  
WITNESS: M. P. BALMERT

**ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND**

LINE NO.	ACCT NO.	ACCOUNT TITLE (A)	ALLOC FACTOR (B)	TOTAL COMPANY (C) \$	RSS/RDS (D) \$	SGSS1/SCD1/SGDS1 (E) \$	SGSS2/SCD2/SGDS2 (F) \$	SDS/LGSS (G) \$	LDS/LGSS (I) \$	MLDS (J) \$
1	154.00	CUSTOMER BASED MATERIALS & SUPPLIES	Pg 30	213,408	186,017	14,472	10,157	1,608	1,005	149
2	190-282-283	CUSTOMER BASED DEFERRED INCOME TAXE	Pg 30	(97,820,037)	(85,145,703)	(6,655,480)	(4,684,713)	(770,111)	(495,841)	(68,189)
3	235.00	CUSTOMER DEPOSITS	9	(3,164,548)	(2,287,494)	(801,833)	(75,221)	0	0	0
4	252.00	CUSTOMER BASED ADVANCES	Pg 30	(27,772)	(24,207)	(1,883)	(1,322)	(209)	(131)	(19)
5		TOTAL CUSTOMER-BASED RATE BASE		346,122,352	304,950,305	23,392,706	14,253,930	2,058,863	1,218,730	247,820
6		EQUITY CAPITAL @ 52.310%		181,056,602	159,519,504	12,236,724	7,456,231	1,076,991	637,518	129,635
7		RETURN ON RATE BASE @ 8.150%		28,208,972	24,853,450	1,906,506	1,161,695	167,797	99,327	20,197
8		RETURN ON EQUITY @ 11.000%		19,916,226	17,547,145	1,346,040	820,185	118,469	70,127	14,260
9	303.30	CUSTOMER & OTHER-BASED SOFTWARE [1]	11	1,354,427	1,066,802	112,986	92,277	41,662	39,996	704
10	380.00	SERVICES	15	13,906,289	12,627,885	1,024,337	215,408	28,786	9,873	0
11	380.00	DIRECT - SERVICES	Pg 15	1,028	0	0	0	0	0	1,028
12	380.12	CSL REPLACEMENT	15	0	0	0	0	0	0	0
13	381.00	METERS	16	913,408	680,444	36,783	184,225	9,216	2,594	146
14	381.10	AUTOMATIC METER READING	16	1,743,495	1,298,815	70,211	351,646	17,592	4,952	279
15	382.00	METER INSTALLATIONS	16	732,417	545,615	29,494	147,721	7,390	2,080	117
16	383.00	HOUSE REGULATORS	21	313,185	283,726	22,825	5,832	680	122	0
17	384.00	HOUSE REG INSTALLATIONS	21	64,393	58,336	4,693	1,199	140	25	0
18	385.00	IND M&R EQUIPMENT	17	213,714	1	8,566	39,370	88,289	77,488	0
19	385.00	DIRECT - IND M&R EQUIPMENT	Pg 15	13,396	0	0	0	0	0	13,396
20	385.10	IND M&R EQUIPMENT - LG VOLUME	17	0	0	0	0	0	0	0
21		TOTAL DEPRECIATION EXPENSES		19,255,752	16,561,624	1,309,895	1,037,678	193,755	137,130	15,671
22		TOTAL NET SALVAGE AMORTIZED [1]	11	1,288,984	1,015,256	107,527	87,818	39,649	38,064	670
23		TOTAL DEPRECIATION & AMORTIZATION EXPENSES		20,544,736	17,576,880	1,417,422	1,125,496	233,404	175,194	16,341

[1] NET SALVAGE @ 28.525% OF TOTAL REPRESENTING CUSTOMER PORTION (PAGE 26)

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**CUSTOMER BASED COSTS - CUSTOMER CHARGE CALCULATION EXCLUDING MAINS**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017**

**ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND**

**111, SCHEDULE 1**  
**PAGE 25 OF 30**  
**WITNESS: M. P. BALMERT**

LINE NO.	ACCT NO.	ACCOUNT TITLE	ALLOC FACTOR	TOTAL COMPANY	RSS/RDS	SGSS1/SCD1/SGDS1	SGSS2/SCD2/SGDS2	SDS/LGSS	LDS/LGSS	MLDS
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
				\$	\$	\$	\$	\$	\$	\$
1	874.00	MAINS & SERVICES [SERVICES ONLY][1]		4,274,336	3,881,085	314,822	66,204	8,847	3,035	343
2	876.00	M & R - INDUSTRIAL	17	295,774	0	11,855	54,487	122,190	107,242	0
3	878.00	METERS & HOUSE REGULATORS	23	2,644,529	2,028,592	118,369	466,786	23,801	6,611	370
4	879.00	CUSTOMER INSTALLATIONS	15	6,208,923	5,638,137	457,349	96,176	12,852	4,408	0
5	890.00	M & R - INDUSTRIAL	17	178,953	0	7,172	32,967	73,929	64,885	0
6	892.00	SERVICES	15	4,367,301	3,965,815	321,695	67,649	9,040	3,101	0
7	893.00	METERS & HOUSE REGULATORS	23	<u>269,059</u>	<u>206,392</u>	<u>12,043</u>	<u>47,492</u>	<u>2,422</u>	<u>673</u>	<u>38</u>
8		TOTAL DISTRIBUTION		18,238,875	15,720,021	1,243,306	831,761	253,081	189,955	751
9	901.00	SUPERVISION	6	0	0	0	0	0	0	0
10	902.00	METER READING	6	863,552	787,335	62,703	12,219	1,088	190	17
11	903.00	CUSTOMER RECORDS AND COLLECTION EXPENSES	6	10,353,303	9,439,521	751,753	146,499	13,045	2,278	207
12	903.00	INTEREST ON CUSTOMER DEPOSITS	9	97,862	70,740	24,796	2,326	0	0	0
13	904.00	UNCOLLECTIBLES-DIS REVENUE	7	3,984,711	3,725,585	127,830	131,296	0	0	0
14	904.00	UNCOLLECTIBLES-GMB/GTS REVENUE	8	340,436	(1)	575	16,212	155,212	153,884	14,554
15	905.00	MISCELLANEOUS	6	19,056	17,374	1,384	270	24	4	0
16	921.00	OFFICE SUPPLIES & EXPENSES	6	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
17		TOTAL CUSTOMER ACCOUNTS		15,658,920	14,040,554	969,041	308,822	169,369	156,356	14,778
18	907.00	SUPERVISION	6	250	228	18	4	0	0	0
19	908.00	CUSTOMER ASSISTANCE	6	696,933	635,422	50,604	9,862	878	153	14
20	909.00	INFORMATIONAL & INSTRUCTIONAL EXPENSES	6	233,383	212,785	16,946	3,302	294	51	5
21	910.00	MISCELLANEOUS	6	927,678	845,800	67,359	13,127	1,169	204	19
22	921.00	OFFICE SUPPLIES & EXPENSES	6	0	0	0	0	0	0	0
23	931.00	RENTS - GENERAL	6	0	0	0	0	0	0	0
24	932.00	MAINTENANCE	6	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
25		TOTAL CUST SERVICE & INFORMATION		1,858,244	1,694,235	134,927	26,295	2,341	408	38
26	912.00	DEMONSTRATION	6	669,089	610,035	48,583	9,468	843	147	13
27	913.00	ADVERTISING	6	<u>29,481</u>	<u>26,879</u>	<u>2,141</u>	<u>417</u>	<u>37</u>	<u>6</u>	<u>1</u>
28		TOTAL SALES		698,570	636,914	50,724	9,885	880	153	14
29		CUSTOMER-RELATED BENEFITS	24	1,767,285	1,426,888	140,199	108,547	47,381	44,005	265
30		CUSTOMER-RELATED PAYROLL TAXES	11	753,068	593,146	62,821	51,307	23,164	22,238	392
31		TOTAL CUST-RELATED O&M [LINES 8, 17, 25, 28,29 & 30]		38,974,962	34,111,758	2,601,018	1,336,617	496,216	413,115	16,238
32		DEPRECIATION EXPENSE	Pg 24	20,544,737	17,576,880	1,417,422	1,125,496	233,404	175,194	16,341
33		INCOME TAXES		14,124,822	12,444,642	954,627	581,685	84,020	49,735	10,113
34		RETURN ON RATE BASE	Pg 24	<u>28,208,972</u>	<u>24,853,450</u>	<u>1,906,506</u>	<u>1,161,695</u>	<u>167,797</u>	<u>99,327</u>	<u>20,197</u>
35		TOTAL ANNUAL CUSTOMER-BASED COST		<u>101,853,493</u>	<u>88,986,730</u>	<u>6,879,573</u>	<u>4,205,493</u>	<u>981,437</u>	<u>737,371</u>	<u>62,889</u>
36		AVERAGE ANNUAL CUSTOMER BILLS [2]		5,188,635	4,734,841	373,476	72,588	6,468	1,142	120
37		<b>MONTHLY CUSTOMER BASED COST/BILL [LINE 36 / LINE 37]</b>		<b>\$ 19.63</b>	<b>\$ 18.79</b>	<b>\$ 18.42</b>	<b>\$ 57.94</b>	<b>\$ 151.74</b>	<b>\$ 645.68</b>	<b>\$524.07</b>

[1] MAINS AND SERVICES @ 25.296% OF TOTAL ACCOUNT 874. (PAGE 27)  
[2] AVERAGE ANNUAL CUSTOMER BILLS INCLUDE FINAL BILLS (ALLOCATION FACTOR 6 DETAIL).

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**CUSTOMER BASED COSTS - CUSTOMER CHARGE CALCULATION EXCLUDING MAINS - INTANGIBLE AND GENERAL PLANT**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017**

**ALLOCATED COST OF SERVICE**  
**CUSTOMER/DEMAND**

111, SCHEDULE 1  
PAGE 26 OF 30  
WITNESS: M. P. BALMERT

<u>LINE NO.</u>	<u>ACCT NO.</u> (A)	<u>ACCOUNT TITLE</u> (B)	<u>ALLOC FACTOR</u> (C)	<u>TOTAL COMPANY</u> (D) \$	<u>RSS/RDS</u> (E) \$	<u>SGSS1/SCD1/SGDS1</u> (F) \$	<u>SGSS2/SCD2/SGDS2</u> (G) \$	<u>SDS/LGSS</u> (H) \$	<u>LDS/LGSS</u> (I) \$	<u>MLDS</u> (J) \$
1		TOTAL GROSS PLANT LESS GENERAL PLANT [1]	Pg 17	2,147,741,511						
2	380.00	SERVICES	Pg 17	490,342,928						
3	380.00	DIRECT - SERVICES	Pg 17	39,403						
4	380.12	CSL REPLACEMENT	Pg 17	-						
5	381.00	METERS	Pg 17	37,714,590						
6	381.10	AUTOMATIC METER READING	Pg 17	24,289,208						
7	382.00	METER INSTALLATIONS	Pg 17	37,776,149						
8	383.00	HOUSE REGULATORS	Pg 17	12,047,377						
9	384.00	HOUSE REG INSTALLATIONS	Pg 17	3,864,772						
10	385.00	IND M&R EQUIPMENT	Pg 17	5,047,477						
11	385.00	DIRECT - IND M&R EQUIPMENT	Pg 17	373,291						
12	385.10	IND M&R EQUIPMENT - LG VOLUME	Pg 17	<u>1,151,820</u>						
13		<b>CUSTOMER-RELATED GROSS PLANT</b>		<b>612,647,014</b>						
14		GENERAL PLANT	Pg 3	27,360,850						
15		GENERAL PLANT CUSTOMER-RELATED COSTS PCT [Line 13 / Line 1]		<u>28.525%</u>						
16		<b>CUSTOMER-RELATED GENERAL PLANT</b>		<b><u>7,804,682</u></b>						
17		INTANGIBLE PLANT [ACCOUNT 303.3 ONLY]	Pg 3	31,528,188						
18		INTANGIBLE PLANT CUSTOMER-RELATED COSTS PCT [Line 13 / Line 1]		<u>28.525%</u>						
19		<b>CUSTOMER-RELATED INTANGIBLE PLANT</b>		<b><u>8,993,416</u></b>						

[1] Exhibit 111, Schedule 3, Page 3, Line 51, less Page 3, Line 50.  
[2] Customer Component of Allocation Factor 20 - Minimum System Mains.



COLUMBIA GAS OF PENNSYLVANIA, INC.  
 CUSTOMER BASED COSTS - CUSTOMER CHARGE CALCULATION EXCLUDING MAINS - ACCOUNT 874  
 FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017

ALLOCATED COST OF SERVICE  
 CUSTOMER/DEMAND

111, SCHEDULE 1  
 PAGE 27 OF 30  
 WITNESS: M. P. BALMERT

LINE NO.	ACCT NO. (A)	ACCOUNT TITLE (B)	ALLOC FACTOR (C)	TOTAL COMPANY (D) \$	RSS/RDS (E) \$	SGSS1/SCD1/SGDS1 (F) \$	SGSS2/SCD2/SGDS2 (G) \$	SDS/LGSS (H) \$	LDS/LGSS (I) \$	MLDS (J) \$
LINE NO.	ACCT. NO.	ACCOUNT		TOTAL PLANT						
1	376.00	MAINS	Pg 3	1,354,749,181						
2	376.00	DIRECT - MAINS - MDS	Pg 3	226,885						
3	376.08	MAINS-CSL REPLACEMENTS	Pg 3	23,785,876						
4	376.30	MAINS-BARE STEEL	Pg 3	68,743,268						
5	376.30	DIRECT - MAINS-BARE STEEL	Pg 3	129,516						
6	376.80	MAINS-CAST IRON	Pg 3	523,053						
7		TOTAL MAINS		1,448,157,780	74.704%					
8	380.00	SERVICES	Pg 3	490,342,928						
9	380.00	DIRECT - SERVICES	Pg 3	39,403						
10	380.12	CSL REPLACEMENT		-						
11		TOTAL SERVICES		490,382,332	25.296%					
12		TOTAL MAINS AND SERVICES		1,938,540,112						
13		TOTAL ACCOUNT 874	Pg 7	16,897,282						
		PERCENTAGE SERVICES		25.296%						
14		<b>CUSTOMER-RELATED ACCOUNT 874</b>		<u>4,274,336</u>						
15	Customer Based Mains			0	0	0	0	0	0	0
16	Services		Pg 23	490,382,332	445,265,703	36,118,660	7,595,412	1,015,010	348,143	39,403
17	Total Customer Based Mains and Services			490,382,332	445,265,703	36,118,660	7,595,412	1,015,010	348,143	39,403
				100.000%	90.800%	7.365%	1.549%	0.207%	0.071%	0.008%
18	Account 874		Line 14	4,274,336						
19	CUSTOMER BASED ACCOUNT 874			4,274,336	3,881,085	314,822	66,204	8,847	3,035	343

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**CUSTOMER BASED COSTS - CUSTOMER CHARGE CALCULATION EXCLUDING MAINS - BENEFITS**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017**

111, SCHEDULE 1

PAGE 28 OF 30

WITNESS: M. P. BALMERT

**ALLOCATED COST OF SERVICE**  
**CUSTOMER/DEMAND**

<u>LINE NO.</u>	<u>ACCT NO.</u> (A)	<u>ACCOUNT TITLE</u> (B)	<u>ADJUSTED LABOR DOLLARS</u> \$		<u>ADJUSTED BENEFIT DOLLARS</u> \$	<u>ADJUSTED PAYROLL TAXES</u> \$
1		TOTAL LABOR DOLLARS (Exhibit 104, Schedule 1, Page 2, Lines 1 & 2)	34,020,714			
2		TOTAL BENEFIT DOLLARS (Exhibit 104, Schedule 1, Page 2, Lines 3, 4, & 5)			6,127,040	
3		TOTAL PAYROLL TAXES (Exhibit 111, Page 9, Lines 1, 2, & 5)				2,610,833
4	874.00	MAINS & SERVICES (1) Alloc 24	1,475,377	4.34%	265,730	113,232
5	876.00	M & R - INDUSTRIAL (2) Alloc 24	170,967	0.50%	30,819	13,132
6	878.00	METERS & HOUSE REGULATORS Alloc 24	1,596,754	4.69%	287,542	122,526
7	879.00	CUSTOMER INSTALLATIONS Alloc 24	3,761,222	11.06%	677,406	288,654
8	890.00	M & R - INDUSTRIAL Alloc 24	55,076	0.16%	9,926	4,230
9	892.00	SERVICES Alloc 24	1,417,757	4.17%	255,314	108,793
10	893.00	METERS & HOUSE REGULATORS Alloc 24	54,680	0.16%	9,865	4,203
11	902.00	METER READING Alloc 24	345,736	1.02%	62,251	26,526
12	903.00	BILLING & ACCOUNTING Alloc 24	918,419	2.70%	165,430	70,493
13	920.00	SALARIES Alloc 24	16,616	0.05%	3,002	1,279
14		TOTAL	9,812,604	28.84%	1,767,285	753,068

- (1) MAINS AND SERVICES @ 25.296% OF TOTAL ACCOUNT 874. (PAGE 27)  
(2) REMAINDER OF LABOR DOLLARS FROM ALLOCATOR #24.

COLUMBIA GAS OF PENNSYLVANIA, INC.  
 CUSTOMER BASED COSTS - CUSTOMER CHARGE CALCULATION EXCLUDING MAINS - ACCOUNTS 870, 880, 885, & 894  
 FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017

ALLOCATED COST OF SERVICE  
 CUSTOMER/DEMAND

111, SCHEDULE 1  
 PAGE 29 OF 30  
 WITNESS: M. P. BALMERT

LINE NO.	ACCT NO. (A)	ACCOUNT TITLE (B)	ALLOC FACTOR (C)	TOTAL COMPANY (D) \$	RSS/RDS (E) \$	SGSS1/SCD1/SGDS1 (F) \$	SGSS2/SCD2/SGDS2 (G) \$	SDS/LGSS (H) \$	LDS/LGSS (I) \$	MLDS (J) \$
1		CUSTOMER COMPONENT EXPENSES								
2	874.00	MAINS & SERVICES	Pg 25	4,274,336	3,881,085	314,822	66,204	8,847	3,035	343
3	876.00	M & R - INDUSTRIAL	Pg 25	295,774	0	11,855	54,487	122,190	107,242	0
4	878.00	METERS & HOUSE REGULATORS	Pg 25	2,644,529	2,028,592	118,369	466,786	23,801	6,611	370
5	879.00	CUSTOMER INSTALLATIONS	Pg 25	6,208,923	5,638,137	457,349	96,176	12,852	4,408	0
6	890.00	M & R - INDUSTRIAL	Pg 25	178,953	0	7,172	32,967	73,929	64,885	0
7	892.00	SERVICES	Pg 25	4,367,301	3,965,815	321,695	67,649	9,040	3,101	0
8	893.00	METERS & HOUSE REGULATORS	Pg 25	<u>269,059</u>	<u>206,392</u>	<u>12,043</u>	<u>47,492</u>	<u>2,422</u>	<u>673</u>	<u>38</u>
9		TOTAL		18,238,875	15,720,021	1,243,306	831,761	253,081	189,955	751
10		TOTAL COMPANY EXPENSES								
11	874.00	MAINS & SERVICES	Pg 21	16,897,282	13,395,320	1,448,097	1,031,579	516,043	502,863	3,380
12	876.00	M & R - INDUSTRIAL	Pg 21	295,774	0	11,855	54,488	122,190	107,242	0
13	878.00	METERS & HOUSE REGULATORS	Pg 21	2,644,529	2,028,592	118,369	466,786	23,801	6,611	370
14	879.00	CUSTOMER INSTALLATIONS	Pg 21	6,208,923	5,638,137	457,349	96,176	12,853	4,408	0
15	890.00	M & R - INDUSTRIAL	Pg 21	178,953	0	7,172	32,967	73,929	64,885	0
16	892.00	SERVICES	Pg 21	4,367,301	3,965,815	321,695	67,650	9,040	3,101	0
17	893.00	METERS & HOUSE REGULATORS	Pg 21	<u>269,059</u>	<u>206,393</u>	<u>12,043</u>	<u>47,492</u>	<u>2,422</u>	<u>673</u>	<u>38</u>
18		TOTAL		30,861,821	25,234,256	2,376,581	1,797,136	760,277	689,783	3,787
19		PERCENTAGE CUSTOMER RELATED (LINE 10 / LINE 19)		59.099%	62.296%	52.315%	46.283%	33.288%	27.538%	19.826%
20		TOTAL COMPANY EXPENSES (PAGE 7)								
21	870.00	SUPERVISION & ENGINEERING	Pg 21	7,545,679	5,994,589	616,029	489,413	228,483	215,882	1,283
22		PERCENTAGE CUSTOMER RELATED			<u>62.296%</u>	<u>52.315%</u>	<u>46.283%</u>	<u>33.288%</u>	<u>27.538%</u>	<u>19.826%</u>
23	870.00	SUPERVISION & ENGINEERING CUSTOMER RELATED		4,418,941	3,734,389	322,276	226,515	76,057	59,450	254
24	880.00	OTHER	Pg 21	6,561,473	5,212,697	535,679	425,577	198,681	187,724	1,116
25		PERCENTAGE CUSTOMER RELATED			<u>62.296%</u>	<u>52.315%</u>	<u>46.283%</u>	<u>33.288%</u>	<u>27.538%</u>	<u>19.826%</u>
26	880.00	OTHER CUSTOMER RELATED		3,842,564	3,247,301	280,240	196,970	66,137	51,695	221
27	885.00	SUPERVISION & ENGINEERING	Pg 21	70,565	56,060	5,761	4,577	2,137	2,019	12
28		PERCENTAGE CUSTOMER RELATED			<u>62.296%</u>	<u>52.315%</u>	<u>46.283%</u>	<u>33.288%</u>	<u>27.538%</u>	<u>19.826%</u>
29	885.00	SUPERVISION & ENGINEERING CUSTOMER RELATED		41,324	34,923	3,014	2,118	711	556	2
30	894.00	OTHER EQUIPMENT	Pg 21	1,088,055	864,394	88,829	70,571	32,946	31,129	185
31		PERCENTAGE CUSTOMER RELATED			<u>62.296%</u>	<u>52.315%</u>	<u>46.283%</u>	<u>33.288%</u>	<u>27.538%</u>	<u>19.826%</u>
32	894.00	OTHER EQUIPMENT CUSTOMER RELATED		637,192	538,483	46,471	32,662	10,967	8,572	37

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**CUSTOMER BASED COSTS - SYSTEM CHARGE CALCULATION EXCLUDING MAINS - OTHER RATE BASE ITEMS**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017**

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1  
PAGE 30 OF 30  
WITNESS: M. P. BALMERT

LINE NO.	ACCT NO. (A)	ACCOUNT TITLE (B)	ALLOC FACTOR (C)	TOTAL COMPANY (D) \$	RSS/RDS (E) \$	SGSS1/SCD1/SGDS1 (F) \$	SGSS2/SCD2/SGDS2 (G) \$	SDS/LGSS (H) \$	LDS/LGSS (I) \$	MLDS (J) \$
1		Total Gross Plant	Pg 12	2,211,566,200	1,741,562,748	184,703,869	150,993,812	67,954,839	65,138,050	1,212,883
2		Customer Based Gross Plant Without Mains	Pg 23	621,640,430	541,095,804	42,295,176	29,771,068	4,894,009	3,151,039	433,335
3		Percent		100.000%	87.043%	6.804%	4.789%	0.787%	0.507%	0.070%
4		Customer Based Gross Plant to Total Gross Plant		28.109%						
5		Total Deferred Income Taxes	Pg 10	(348,007,429)						
6		<b>CUSTOMER BASED DEFERRED INCOME TAXES</b>		<b>(97,820,037)</b>	<b>(85,145,703)</b>	<b>(6,655,480)</b>	<b>(4,684,713)</b>	<b>(770,111)</b>	<b>(495,841)</b>	<b>(68,189)</b>
7		DIST. PLANT EXCL ACCTS 375.70, 375.71, & 387	Pg 22	2,120,695,852	1,670,354,663	176,902,683	144,481,828	65,231,389	62,620,826	1,104,464
8		Customer Based Dist Plant Excl 375.7, 375.71.387	Pg 23	612,647,015	534,012,230	41,544,945	29,158,347	4,617,372	2,885,463	428,658
9		Percent		100.000%	87.165%	6.781%	4.759%	0.754%	0.471%	0.070%
10		Customer Based Gross Plant to Dist Plant Excl 375.7, 375.71.387		28.889%						
11		Materials & Supplies	Pg 10	738,718						
12		<b>CUSTOMER BASED MATERIALS &amp; SUPPLIES</b>		<b>213,408</b>	<b>186,017</b>	<b>14,472</b>	<b>10,157</b>	<b>1,608</b>	<b>1,005</b>	<b>149</b>
13		DIST. PLANT EXCL ACCTS 375.70, 375.71, & 387	Pg 22	2,120,695,852	1,670,354,663	176,902,683	144,481,828	65,231,389	62,620,826	1,104,464
14		Customer Based Gross Plant Without Mains	Pg 23	612,647,015	534,012,230	41,544,945	29,158,347	4,617,372	2,885,463	428,658
15		Percent		100.000%	87.165%	6.781%	4.759%	0.754%	0.471%	0.070%
16		Customer Based Gross Plant to Dist Plant Excl 375.7, 375.71.387		28.889%						
17		Customer Advances	Pg 10	(96,133)						
18		<b>CUSTOMER BASED ADVANCES</b>		<b>(27,772)</b>	<b>(24,207)</b>	<b>(1,883)</b>	<b>(1,322)</b>	<b>(209)</b>	<b>(131)</b>	<b>(19)</b>

COLUMBIA GAS OF PENNSYLVANIA, INC.  
ALLOCATED COST OF SERVICE - TABLE OF CONTENTS

DOCKET NO.: R-2015-2468056

WITNESS: M. P. BALMERT

STUDY TYPE: PEAK & AVERAGE

FORECASTED TEST YEAR: DECEMBER 31, 2017

111, SCHEDULE 2

<u>PAGE</u>	<u>DESCRIPTION</u>
1	RATE OF RETURN BY CLASS - PROFORMA @ PROPOSED RATES
2	RATE OF RETURN BY CLASS - CURRENT @ CURRENT RATES
3	GROSS PLANT (Accounts 101 & 106)
4	DEPRECIATION RESERVE
5	DEPRECIATION AND AMORTIZATION EXPENSE
6	OPERATING REVENUE @ PROPOSED & CURRENT RATES
7	PRODUCTION & DISTRIBUTION O&M EXPENSES
8	OTHER O&M EXPENSES
9	TAXES OTHER THAN INCOME TAXES
10	RATE BASE
11	STATE/FEDERAL INCOME TAXES
12	ALLOCATION FACTORS
13	ALLOCATION FACTORS (CONT.)

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**RATE OF RETURN BY CLASS - PROFORMA @ PROPOSED RATES**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017**

**ALLOCATED COST OF SERVICE  
PEAK & AVERAGE**

**111, SCHEDULE 2  
PAGE 1 OF 13**

**WITNESS: M. P. BALMERT**

LINE NO.	ACCOUNT TITLE (A)	ALLOC FACTOR (B)	TOTAL COMPANY (C) \$	RSS/RDS (D) \$	SGSS1/SCD1/SGDS1 (E) \$	SGSS2/SCD2/SGDS2 (F) \$	SDS/LGSS (G) \$	LDS/LGSS (H) \$	MLDS (I) \$
1	TOTAL REVENUE [PAGE 6]		547,467,040	402,880,482	48,266,742	53,185,543	21,690,720	19,790,537	1,653,016
2	PRODUCTS PURCHASED [PAGE 7]		124,134,259	90,195,150	14,478,538	16,218,817	2,742,911	226,707	272,136
3	OPERATING & MAINTENANCE EXPENSES [PAGES 7 & 8]		183,479,983	139,409,491	13,135,629	13,342,882	6,727,993	10,823,002	40,985
4	DEPRECIATION & AMORTIZATION [PAGE 5]		61,910,132	41,644,278	5,305,039	6,410,471	3,173,157	5,337,815	39,372
5	TAXES OTHER THAN INCOME [PAGE 9]		3,090,284	2,174,689	256,587	284,680	142,274	231,417	638
6	TOTAL EXPENSES & TAXES OTHER THAN INCOME		372,614,658	273,423,607	33,175,792	36,256,849	12,786,336	16,618,942	353,131
7	OPERATING INCOME BEFORE TAXES		174,852,382	129,456,875	15,090,949	16,928,694	8,904,384	3,171,595	1,299,885
8	INCOME TAXES		53,444,203	41,165,612	4,565,666	4,980,785	2,648,563	(446,137)	529,713
9	INVESTMENT TAX CREDIT	12	(360,240)	(236,563)	(31,521)	(38,492)	(19,792)	(33,675)	(198)
10	NET INCOME TAXES		53,083,963	40,929,049	4,534,145	4,942,293	2,628,772	(479,812)	529,515
11	OPERATING INCOME		121,768,419	88,527,826	10,556,804	11,986,401	6,275,612	3,651,407	770,370
12	RATE BASE [PAGE 10]		1,494,091,075	970,459,921	134,034,781	163,223,086	83,602,238	141,987,637	783,413
13	RATE OF RETURN EARNED ON RATE BASE		8.150%	9.122%	7.876%	7.344%	7.507%	2.572%	98.335%
14	UNITIZED RETURN		1.00	1.12	0.97	0.90	0.92	0.32	12.07

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**RATE OF RETURN BY CLASS - CURRENT @ CURRENT RATES**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017**

**ALLOCATED COST OF SERVICE  
PEAK & AVERAGE**

**111, SCHEDULE 2**  
**PAGE 2 OF 13**  
**WITNESS: M. P. BALMERT**

LINE NO.	ACCOUNT TITLE (A)	ALLOC FACTOR (B)	TOTAL COMPANY (C) \$	RSS/RDS (D) \$	SGSS1/SCD1/SGDS1 (E) \$	SGSS2/SCD2/SGDS2 (F) \$	SDS/LGSS (G) \$	LDS/LGSS (H) \$	MLDS (I) \$
1	TOTAL REVENUE [PAGE 6]		492,210,045	359,700,687	43,985,211	49,421,376	19,839,806	17,610,400	1,652,566
2	PRODUCTS PURCHASED [PAGE 7]		124,134,259	90,195,150	14,478,538	16,218,817	2,742,911	226,707	272,136
3	OPERATING & MAINTENANCE EXPENSES [PAGES 7 & 8]		182,774,037	138,857,840	13,080,929	13,294,792	6,704,347	10,795,150	40,980
4	DEPRECIATION & AMORTIZATION [PAGE 5]		61,910,132	41,644,278	5,305,039	6,410,471	3,173,157	5,337,815	39,372
5	TAXES OTHER THAN INCOME [PAGE 9]		<u>3,090,284</u>	<u>2,174,689</u>	<u>256,587</u>	<u>284,680</u>	<u>142,274</u>	<u>231,417</u>	<u>638</u>
6	TOTAL EXPENSES & TAXES OTHER THAN INCOME		371,908,712	272,871,956	33,121,093	36,208,760	12,762,689	16,591,089	353,125
7	OPERATING INCOME BEFORE TAXES		120,301,333	86,828,731	10,864,118	13,212,617	7,077,117	1,019,311	1,299,440
8	INCOME TAXES [PAGE 11]		31,682,589	24,160,308	2,879,490	3,498,360	1,919,626	(1,304,730)	529,536
9	INVESTMENT TAX CREDIT	12	<u>(360,240)</u>	<u>(236,563)</u>	<u>(31,521)</u>	<u>(38,492)</u>	<u>(19,792)</u>	<u>(33,675)</u>	<u>(198)</u>
10	NET INCOME TAXES		31,322,349	23,923,745	2,847,969	3,459,868	1,899,835	(1,338,406)	529,338
11	OPERATING INCOME		88,978,984	62,904,986	8,016,148	9,752,749	5,177,282	2,357,717	770,102
12	RATE BASE [PAGE 10]		1,494,091,075	970,459,921	134,034,781	163,223,086	83,602,238	141,987,637	783,413
13	RATE OF RETURN EARNED ON RATE BASE		5.955%	6.482%	5.981%	5.975%	6.193%	1.661%	98.301%
14	UNITIZED RETURN		1.00	1.09	1.00	1.00	1.04	0.28	16.51

COLUMBIA GAS OF PENNSYLVANIA, INC.  
GROSS PLANT (Accounts 101 & 106)  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017

ALLOCATED COST OF SERVICE  
PEAK & AVERAGE

111, SCHEDULE 2  
PAGE 3 OF 13

WITNESS: M. P. BALMERT

LINE NO.	ACCT. NO. (A)	ACCOUNT TITLE (B)	ALLOC FACTOR (C)	TOTAL COMPANY (D) \$	RSS/RDS (E) \$	SGSS1/SCD1/SGDS1 (F) \$	SGSS2/SCD2/SGDS2 (G) \$	SDS/LGSS (H) \$	LDS/LGSS (I) \$	MLDS (J) \$
1	301-305	INTANGIBLE PLANT	11	36,463,839	23,938,145	3,187,304	3,894,703	2,006,970	3,417,756	18,961
2	350-362	UNDERGROUND STORAGE PLANT	25	5,882,069	4,312,086	716,142	725,553	110,936	9,176	8,176
DISTRIBUTION PLANT										
3	374.10	LAND - CITY GATE & M/L IND M&R	5	21,944	12,494	2,094	2,873	1,632	2,851	0
4	374.20	LAND - OTHER DISTRIBUTION	5	477,118	271,657	45,527	62,464	35,474	61,997	0
5	374.30	LAND RIGHTS - CITY GATE MAIN LINE	5	95,361	54,296	9,099	12,485	7,090	12,391	0
6	374.40	LAND RIGHTS - OTHER DISTRIBUTION	5	2,737,177	1,558,467	261,181	358,351	203,509	355,669	0
7	374.40	DIRECT - LAND RIGHTS-OTHER DISTRIBUTION		0	0	0	0	0	0	0
8	374.41	LAND RIGHTS - OTHER DISTRIBUTION LOC	5	13	10	1	0	0	2	0
9	374.50	RIGHTS OF WAY	5	3,238,374	1,843,833	309,006	423,968	240,773	420,794	0
10	374.50	DIRECT - RIGHTS OF WAY		1,246	0	0	0	0	0	1,246
11	375.20	M & R STRUCTURES - CITY GATE	5	743,068	423,081	70,904	97,283	55,247	96,554	0
12	375.31	M & R STRUCTURES - LOCAL GAS PURCH	5	946,925	539,151	90,356	123,971	70,404	123,044	0
13	375.40	M & R STRUCTURES - REGULATING	5	3,813,061	2,171,043	363,842	499,206	283,501	495,469	0
14	375.40	DIRECT - M & R STRUCTURES - REGULATING	5	27,124	0	0	0	0	0	27,124
15	375.60	M & R STRUCTURES - DIST. IND. M & R	17	87,670	0	3,514	16,151	36,218	31,787	0
16	375.70	M & R STRUCTURES - OTHER	11	7,821,943	5,135,027	683,716	835,462	430,520	733,151	4,067
17	375.71	M & R STRUCTURES - OTHER LEASED	11	4,517,569	2,965,739	394,881	482,522	248,647	423,432	2,349
18	375.80	M & R STRUCTURES - COMMUNICATION	5	16,515	9,403	1,576	2,162	1,228	2,146	0
19	376.00	MAINS	5	1,354,749,181	771,353,542	129,270,167	177,363,763	100,725,602	176,036,109	0
20	376.00	DIRECT - MAINS - MDS		226,885	0	0	0	0	0	226,885
21	376.08	MAINS-CSL REPLACEMENTS	5	23,785,876	13,542,964	2,269,648	3,114,047	1,768,480	3,090,737	0
22	376.30	MAINS-BARE STEEL	5	68,743,268	39,140,355	6,559,483	8,999,869	5,111,062	8,932,500	0
23	376.30	DIRECT - MAINS-BARE STEEL		129,516	0	0	0	0	0	129,516
24	376.80	MAINS-CAST IRON	5	523,053	297,811	49,910	68,478	38,889	67,966	0
25	378.10	M & R EQUIP - GENERAL	5	55,331	31,504	5,280	7,244	4,114	7,190	0
26	378.20	M & R EQUIP - GENERAL - REGULATING	5	46,736,190	26,610,184	4,459,567	6,118,702	3,474,836	6,072,901	0
27	378.20	DIRECT - M & R EQUIP-GEN-REG		291,035	0	0	0	0	0	291,035
28	378.30	M & R EQUIP - LOCAL GAS PURCHASES	5	461,790	262,930	44,064	60,458	34,334	60,005	0
29	379.10	M & R EQUIP - CITY GATE	5	141,567	80,604	13,508	18,534	10,526	18,395	0
30	379.11	M & R EQUIP - EXCHANGE GAS	5	(450)	(256)	(43)	(59)	(33)	(58)	0
31	380.00	SERVICES	15	490,342,928	445,265,703	36,118,660	7,595,412	1,015,010	348,144	0
32	380.00	DIRECT - SERVICES		39,403	0	0	0	0	0	39,403
33	380.12	CSL REPLACEMENT	15	0	0	0	0	0	0	0
34	381.00	METERS	16	37,714,590	28,095,484	1,518,767	7,606,656	380,540	107,109	6,034
35	381.10	AUTOMATIC METER READING	16	24,289,208	18,094,246	978,126	4,898,890	245,078	68,981	3,886
36	382.00	METER INSTALLATIONS	16	37,776,149	28,141,342	1,521,246	7,619,071	381,161	107,284	6,044
37	383.00	HOUSE REGULATORS	21	12,047,377	10,914,201	878,013	224,322	26,143	4,699	0
38	384.00	HOUSE REG INSTALLATIONS	21	3,864,772	3,501,252	281,665	71,962	8,387	1,507	0
39	385.00	IND M&R EQUIPMENT	17	5,047,477	0	202,303	929,846	2,085,214	1,830,114	0
40	385.00	DIRECT - IND M&R EQUIPMENT		373,291	0	0	0	0	0	373,291
41	385.10	IND M&R EQUIPMENT - LG VOLUME	17	1,151,820	0	46,165	212,188	475,840	417,627	0
42	387.10	OTHER EQUIP DISTRIBUTION	11	16,603	10,900	1,451	1,773	914	1,556	9
43	387.20	OTHER EQUIP ODORIZATION	11	117,248	76,972	10,249	12,523	6,453	10,990	61
44	387.42	OTHER EQUIP RADIO	11	121,945	80,056	10,659	13,025	6,712	11,430	63
45	387.44	OTHER EQUIP COMMUNICATION	11	635,499	417,199	55,549	67,878	34,978	59,565	331
46	387.46	OTHER EQUIP CUSTOMER INFO SERVICE	11	3,572,300	2,345,179	312,255	381,557	196,619	334,832	1,858
47	387.45	DIRECT - OTHER EQUIP CUSTOMER INFO SERVICE		56,078	0	0	0	0	0	56,078
48	387.50	GPS EQUIPMENT	11	4,304,405	2,825,799	376,248	459,754	236,915	403,452	2,238
49		TOTAL DISTRIBUTION PLANT		2,141,859,442	1,406,072,167	187,218,634	228,762,790	117,882,014	200,752,320	1,171,518
50	389-398	GENERAL PLANT	11	27,360,850	17,962,124	2,391,612	2,922,412	1,505,941	2,564,532	14,228
51		TOTAL GROSS PLANT		2,211,566,200	1,452,284,523	193,513,692	236,305,458	121,505,860	206,743,784	1,212,883



**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**DEPRECIATION RESERVE**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017**

111, SCHEDULE 2  
PAGE 4 OF 13  
WITNESS: M. P. BALMERT

**ALLOCATED COST OF SERVICE  
PEAK & AVERAGE**

LINE NO.	ACCT. NO. (A)	ACCOUNT TITLE (B)	ALLOC FACTOR (C)	TOTAL COMPANY (D) \$	RSS/RDS (E) \$	SGSS1/SCD1/SGDS1 (F) \$	SGSS2/SCD2/SGDS2 (G) \$	SDS/LGSS (H) \$	LDS/LGSS (I) \$	MLDS (J) \$
1	301-305	INTANGIBLE PLANT	11	9,799,828	6,433,489	856,603	1,046,720	539,383	918,538	5,096
2	350-362	UNDERGROUND STORAGE PLANT	25	1,458,480	1,069,197	177,570	179,904	27,507	2,275	2,027
<b>DISTRIBUTION PLANT</b>										
3	374.10	LAND - CITY GATE & M/L IND M&R	5	0	0	0	0	0	0	0
4	374.20	LAND - OTHER DISTRIBUTION	5	146,190	83,236	13,949	19,139	10,869	18,996	0
5	374.30	LAND RIGHTS - CITY GATE MAIN LINE	5	0	0	0	0	0	0	0
6	374.40	LAND RIGHTS - OTHER DISTRIBUTION	5	683,587	389,214	65,228	89,495	50,825	88,825	0
7	374.40	DIRECT - LAND RIGHTS-OTHER DISTRIBUTION	5	0	0	0	0	0	0	0
8	374.41	LAND RIGHTS - OTHER DISTRIBUTION LOC	5	0	0	0	0	0	0	0
9	374.50	RIGHTS OF WAY	5	1,646,725	937,595	157,131	215,589	122,434	213,975	0
10	374.50	DIRECT - RIGHTS OF WAY	5	753	0	0	0	0	0	753
11	375.20	M & R STRUCTURES - CITY GATE	5	0	0	0	0	0	0	0
12	375.31	M & R STRUCTURES - LOCAL GAS PURCH	5	0	0	0	0	0	0	0
13	375.40	M & R STRUCTURES - REGULATING	5	1,404,563	799,716	134,023	183,885	104,429	182,509	0
14	375.40	DIRECT - M & R STRUCTURES - REGULATING	5	1,797	0	0	0	0	0	1,797
15	375.60	M & R STRUCTURES - DIST. IND. M & R	17	74,808	0	2,998	13,781	30,905	27,124	0
16	375.70	M & R STRUCTURES - OTHER	11	2,587,833	1,698,887	226,203	276,406	142,434	242,558	1,346
17	375.71	M & R STRUCTURES - OTHER LEASED	11	1,080,296	709,204	94,429	115,386	59,460	101,256	562
18	375.80	M & R STRUCTURES - COMMUNICATION	5	6,866	3,909	655	899	511	892	0
19	376.00	MAINS	5	164,641,444	93,741,899	15,710,087	21,554,858	12,241,091	21,393,509	0
20	376.00	DIRECT - MAINS - MDS	5	38,767	0	0	0	0	0	38,767
21	376.08	MAINS-CSL REPLACEMENTS	5	0	0	0	0	0	0	0
22	376.30	MAINS-BARE STEEL	5	38,884,469	22,139,650	3,710,356	5,090,755	2,891,060	5,052,648	0
23	376.30	DIRECT - MAINS-BARE STEEL	5	118,266	0	0	0	0	0	118,266
24	376.80	MAINS-CAST IRON	5	316,848	180,404	30,234	41,482	23,558	41,171	0
25	378.10	M & R EQUIP - GENERAL	5	0	0	0	0	0	0	0
26	378.20	M & R EQUIP - GENERAL - REGULATING	5	11,246,689	6,403,527	1,073,159	1,472,417	836,191	1,461,395	0
27	378.20	DIRECT - M & R EQUIP-GEN-REG	5	16,589	0	0	0	0	0	16,589
28	378.30	M & R EQUIP - LOCAL GAS PURCHASES	5	0	0	0	0	0	0	0
29	379.10	M & R EQUIP - CITY GATE	5	98,046	55,825	9,356	12,836	7,290	12,740	0
30	379.11	M & R EQUIP - EXCHANGE GAS	5	0	0	0	0	0	0	0
31	380.00	SERVICES	15	122,253,501	111,014,737	9,005,193	1,893,707	253,065	86,800	0
32	380.00	DIRECT - SERVICES	15	24,113	0	0	0	0	0	24,113
33	380.12	CSL REPLACEMENT	15	0	0	0	0	0	0	0
34	381.00	METERS	16	16,508,949	12,298,342	664,815	3,329,690	166,575	46,885	2,641
35	381.10	AUTOMATIC METER READING	16	10,448,842	7,783,865	420,775	2,107,427	105,429	29,675	1,672
36	382.00	METER INSTALLATIONS	16	12,548,434	9,347,956	505,325	2,530,894	126,614	35,638	2,008
37	383.00	HOUSE REGULATORS	21	3,829,549	3,469,342	279,098	71,306	8,310	1,494	0
38	384.00	HOUSE REG INSTALLATIONS	21	3,044,466	2,758,104	221,881	56,688	6,607	1,187	0
39	385.00	IND M&R EQUIPMENT	17	3,180,306	0	127,467	585,876	1,313,848	1,153,115	0
40	385.00	DIRECT - IND M&R EQUIPMENT	17	85,568	0	0	0	0	0	85,568
41	385.10	IND M&R EQUIPMENT - LG VOLUME	17	0	0	0	0	0	0	0
42	387.10	OTHER EQUIP DISTRIBUTION	11	0	0	0	0	0	0	0
43	387.20	OTHER EQUIP ODORIZATION	11	0	0	0	0	0	0	0
44	387.42	OTHER EQUIP RADIO	11	0	0	0	0	0	0	0
45	387.44	OTHER EQUIP COMMUNICATION	11	0	0	0	0	0	0	0
46	387.46	OTHER EQUIP CUSTOMER INFO SERVICE	11	1,149,527	754,653	100,480	122,781	63,270	107,745	598
47	387.45	DIRECT - OTHER EQUIP CUSTOMER INFO SERVICE	11	2,097	0	0	0	0	0	2,097
48	387.50	GPS EQUIPMENT	11	811,351	532,644	70,920	86,660	44,657	76,048	422
49		TOTAL DISTRIBUTION PLANT		396,881,239	275,102,707	32,623,760	39,871,958	18,609,430	30,376,185	297,199
50	389-398	GENERAL PLANT	11	12,949,752	8,501,383	1,131,938	1,383,163	712,754	1,213,780	6,734
51		TOTAL DEPRECIATION RESERVE		421,089,299	291,106,776	34,789,871	42,481,744	19,889,074	32,510,779	311,056

COLUMBIA GAS OF PENNSYLVANIA, INC.  
DEPRECIATION AND AMORTIZATION EXPENSE  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017

ALLOCATED COST OF SERVICE  
PEAK & AVERAGE

111, SCHEDULE 2  
PAGE 5 OF 13  
WITNESS: M. P. BALMERT

LINE NO.	ACCT. NO. (A)	ACCOUNT TITLE (B)	ALLOC FACTOR (C)	TOTAL COMPANY (D) \$	RSS/RDS (E) \$	SGSS1/SCD1/SGDS1 (F) \$	SGSS2/SCD2/SGDS2 (G) \$	SDS/LGSS (H) \$	LDS/LGSS (I) \$	MLDS (J) \$
1	301-305	INTANGIBLE PLANT	11	4,748,209	3,117,152	415,041	507,156	261,341	445,050	2,469
2	350-362	UNDERGROUND STORAGE PLANT	25	288,254	211,316	35,095	35,556	5,437	450	401
DISTRIBUTION PLANT										
3	374.10	LAND - CITY GATE & M/L IND M&R	5	0	0	0	0	0	0	0
4	374.20	LAND - OTHER DISTRIBUTION	5	0	0	0	0	0	0	0
5	374.30	LAND RIGHTS - CITY GATE MAIN LINE	5	0	0	0	0	0	0	0
6	374.40	LAND RIGHTS - OTHER DISTRIBUTION	5	49,497	28,182	4,723	6,480	3,680	6,432	0
7	374.40	DIRECT - LAND RIGHTS-OTHER DISTRIBUTION		0	0	0	0	0	0	0
8	374.41	LAND RIGHTS - OTHER DISTRIBUTION LOC	5	0	0	0	0	0	0	0
9	374.50	RIGHTS OF WAY	5	41,861	23,834	3,994	5,480	3,112	5,439	0
10	374.50	DIRECT - RIGHTS OF WAY		16	0	0	0	0	0	16
11	375.20	M & R STRUCTURES - CITY GATE	5	0	0	0	0	0	0	0
12	375.31	M & R STRUCTURES - LOCAL GAS PURCH	5	0	0	0	0	0	0	0
13	375.40	M & R STRUCTURES - REGULATING	5	117,206	66,734	11,184	15,345	8,714	15,230	0
14	375.40	DIRECT - M & R STRUCTURES - REGULATING	5	586	0	0	0	0	0	586
15	375.60	M & R STRUCTURES - DIST. IND. M & R	17	806	0	32	149	333	292	0
16	375.70	M & R STRUCTURES - OTHER	11	253,915	166,693	22,195	27,121	13,976	23,800	132
17	375.71	M & R STRUCTURES - OTHER LEASED	11	501,481	329,217	43,834	53,563	27,602	47,004	261
18	375.80	M & R STRUCTURES - COMMUNICATION	5	326	186	31	43	24	42	0
19	376.00	MAINS	5	27,988,692	15,935,921	2,670,681	3,664,280	2,080,959	3,636,851	0
20	376.00	DIRECT - MAINS - MDS		4,197	0	0	0	0	0	4,197
21	376.08	MAINS-CSL REPLACEMENTS	5	0	0	0	0	0	0	0
22	376.30	MAINS-BARE STEEL	5	1,862,782	1,060,612	177,747	243,875	138,498	242,050	0
23	376.30	DIRECT - MAINS-BARE STEEL		3,188	0	0	0	0	0	3,188
24	376.80	MAINS-CAST IRON	5	14,024	7,985	1,338	1,836	1,043	1,822	0
25	378.10	M & R EQUIP - GENERAL	5	0	0	0	0	0	0	0
26	378.20	M & R EQUIP - GENERAL - REGULATING	5	1,507,886	858,545	143,883	197,412	112,111	195,935	0
27	378.20	DIRECT - M & R EQUIP-GEN-REG		7,916	0	0	0	0	0	7,916
28	378.30	M & R EQUIP - LOCAL GAS PURCHASES	5	0	0	0	0	0	0	0
29	379.10	M & R EQUIP - CITY GATE	5	4,193	2,388	400	549	312	545	0
30	379.11	M & R EQUIP - EXCHANGE GAS	5	0	0	0	0	0	0	0
31	380.00	SERVICES	15	13,906,289	12,627,884	1,024,337	215,408	28,786	9,874	0
32	380.00	DIRECT - SERVICES		1,028	0	0	0	0	0	1,028
33	380.12	CSL REPLACEMENT	15	0	0	0	0	0	0	0
34	381.00	METERS	16	913,408	680,443	36,783	184,225	9,216	2,594	146
35	381.10	AUTOMATIC METER READING	16	1,743,495	1,298,817	70,211	351,646	17,592	4,952	279
36	382.00	METER INSTALLATIONS	16	732,417	545,614	29,494	147,721	7,390	2,080	117
37	383.00	HOUSE REGULATORS	21	313,185	283,727	22,825	5,832	680	122	0
38	384.00	HOUSE REG INSTALLATIONS	21	64,393	58,336	4,693	1,199	140	25	0
39	385.00	IND M&R EQUIPMENT	17	213,714	0	8,566	39,370	88,289	77,488	0
40	385.00	DIRECT - IND M&R EQUIPMENT		13,396	0	0	0	0	0	13,396
41	385.10	IND M&R EQUIPMENT - LG VOLUME	17	0	0	0	0	0	0	0
42	387.10	OTHER EQUIP DISTRIBUTION	11	0	0	0	0	0	0	0
43	387.20	OTHER EQUIP ODORIZATION	11	0	0	0	0	0	0	0
44	387.42	OTHER EQUIP RADIO	11	0	0	0	0	0	0	0
45	387.44	OTHER EQUIP COMMUNICATION	11	0	0	0	0	0	0	0
46	387.46	OTHER EQUIP CUSTOMER INFO SERVICE	11	205,583	134,963	17,970	21,958	11,315	19,269	107
47	387.45	DIRECT - OTHER EQUIP CUSTOMER INFO SERVICE		1,800	0	0	0	0	0	1,800
48	387.50	GPS EQUIPMENT	11	490,955	322,307	42,914	52,439	27,022	46,017	255
49		TOTAL DISTRIBUTION PLANT		50,958,235	34,432,387	4,337,835	5,235,931	2,580,794	4,337,862	33,426
51	389-398	GENERAL PLANT	11	1,396,645	916,884	122,081	149,176	76,871	130,908	726
52		NET DEPRECIATION & AMORTIZATION EXPENSE		57,391,343	38,677,738	4,910,052	5,927,819	2,924,443	4,914,269	37,022
53		AMORTIZATION OF NET NEGATIVE SALVAGE	11	4,518,788	2,966,539	394,987	482,652	248,714	423,546	2,350
54		TOTAL AMORTIZATION AND DEPRECIATION EXPENSE		61,910,131	41,644,278	5,305,039	6,410,471	3,173,157	5,337,815	39,372

COLUMBIA GAS OF PENNSYLVANIA, INC.  
OPERATING REVENUE @ PROPOSED & CURRENT RATES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017

ALLOCATED COST OF SERVICE  
PEAK & AVERAGE

111, SCHEDULE 2  
PAGE 6 OF 13  
WITNESS: M. P. BALMERT

LINE NO.	ACCT NO. (A)	ACCOUNT TITLE (B)	ALLOC FACTOR (C)	TOTAL COMPANY (D)	RSS/RDS (E)	SGSS1/SCD1/SGDS1 (F)	SGSS2/SCD2/SGDS2 (G)	SDS/LGSS (H)	LDS/LGSS (I)	MLDS (J)
				\$	\$	\$	\$	\$	\$	\$
<u>PROPOSED OPERATING REVENUE</u>										
SALES REVENUE										
1	480/481	SALES BASE REVENUE		251,725,457	204,931,466	24,572,894	19,638,199	2,410,509	152,510	19,879
2		USP REVENUE		18,772,538	18,772,538	0	0	0	0	0
3		STAS REVENUE		0	0	0	0	0	0	0
4		RIDER CC - CUSTOMER CHOICE		33,400	24,298	4,337	4,765	0	0	0
5		GAS PROCUREMENT REVENUE		2,387,896	1,688,702	301,432	331,172	61,506	5,084	0
6		MERCHANT FUNCTION REVENUE		1,103,635	1,010,792	44,239	48,604	0	0	0
7		GAS COST REVENUE		116,090,077	84,636,917	13,442,546	14,768,860	2,742,911	226,707	272,136
8		TOTAL SALES REVENUE		390,113,003	311,064,713	38,365,448	34,791,600	5,214,926	384,301	292,015
TRANSPORTATION REVENUE										
9	489.00	TRANSPORTATION BASE REVENUE		135,924,181	78,979,581	8,698,910	16,749,071	16,156,593	15,256,731	83,295
10		USP REVENUE		5,836,220	5,836,220	0	0	0	0	0
11		STAS REVENUE		0	0	0	0	0	0	0
12		RIDER CC - CUSTOMER CHOICE		13,384	7,554	1,535	4,295	0	0	0
13		FLEX REVENUE		5,654,888	0	3,645	34,665	256,411	4,087,013	1,273,154
14		GAS COST REVENUE		8,044,182	5,558,233	1,035,992	1,449,957	0	0	0
15		TOTAL TRANSPORTATION REVENUE		155,472,855	90,381,588	9,740,082	18,237,988	16,413,004	19,343,744	1,356,449
MISCELLANEOUS REVENUE										
16	487.00	FORFEITED DISCOUNTS	10	1,327,956	970,297	118,693	133,420	53,556	47,528	4,462
17	488.00	MISCELLANEOUS REVENUE	6	145,854	132,981	10,591	2,064	184	32	3
18	493.00	RENTS	11	158,725	104,201	13,874	16,953	8,736	14,877	83
19	495.00	OTHER	6	248,647	226,701	18,054	3,518	313	55	5
20		TOTAL MISCELLANEOUS REVENUE		1,881,182	1,434,181	161,212	155,955	62,790	62,492	4,552
21		TOTAL PROPOSED OPERATING REVENUE		547,467,040	402,880,482	48,286,742	53,185,543	21,690,720	19,790,537	1,653,016
<u>CURRENT OPERATING REVENUE</u>										
SALES REVENUE										
22	480/481	SALES BASE REVENUE		215,343,199	174,174,360	21,428,464	17,418,550	2,170,964	130,982	19,879
23		USP REVENUE		16,522,555	16,522,555	0	0	0	0	0
24		STAS REVENUE		0	0	0	0	0	0	0
25		RIDER CC - CUSTOMER CHOICE		33,400	24,298	4,337	4,765	0	0	0
26		GAS PROCUREMENT REVENUE		2,387,896	1,688,702	301,432	331,172	61,506	5,084	0
27		MERCHANT FUNCTION REVENUE		1,103,635	1,010,792	44,239	48,604	0	0	0
28		GAS COST REVENUE		116,090,077	84,636,917	13,442,546	14,768,860	2,742,911	226,707	272,136
29		TOTAL SALES REVENUE		351,480,762	278,057,624	35,221,018	32,571,951	4,975,381	362,773	292,015
TRANSPORTATION REVENUE										
30	489.00	TRANSPORTATION BASE REVENUE		120,133,096	69,604,408	7,573,801	15,218,033	14,550,635	13,102,924	83,295
31		USP REVENUE		5,136,720	5,136,720	0	0	0	0	0
32		STAS REVENUE		0	0	0	0	0	0	0
33		RIDER CC - CUSTOMER CHOICE		13,384	7,554	1,535	4,295	0	0	0
34		FLEX REVENUE		5,654,888	0	3,645	34,665	256,411	4,087,013	1,273,154
35		GAS COST REVENUE		8,044,182	5,558,233	1,035,992	1,449,957	0	0	0
36		TOTAL TRANSPORTATION REVENUE		138,982,270	80,306,915	8,614,973	16,706,950	14,807,046	17,189,937	1,356,449
MISCELLANEOUS REVENUE										
37	487.00	FORFEITED DISCOUNTS	10	1,193,787	872,264	106,701	119,940	48,145	42,726	4,011
38	488.00	MISCELLANEOUS REVENUE	6	145,854	132,981	10,591	2,064	184	32	3
39	493.00	RENTS	11	158,725	104,201	13,874	16,953	8,736	14,877	83
40	495.00	OTHER	6	248,647	226,701	18,054	3,518	313	55	5
41		TOTAL MISCELLANEOUS REVENUE		1,747,013	1,336,148	149,220	142,475	57,379	57,690	4,102
42		TOTAL CURRENT OPERATING REVENUE		492,210,045	359,700,687	43,985,211	49,421,376	19,839,806	17,610,400	1,652,566

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**PRODUCTION & DISTRIBUTION O&M EXPENSES**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017**

**ALLOCATED COST OF SERVICE  
PEAK & AVERAGE**

**111, SCHEDULE 2**  
**PAGE 7 OF 13**  
**WITNESS: M. P. BALMERT**

LINE NO.	ACCT NO. (A)	ACCOUNT TITLE (B)	ALLOC FACTOR (C)	TOTAL COMPANY (D) \$	RSS/RDS (E) \$	SGSS1/SCD1/SGDS1 (F) \$	SGSS2/SCD2/SGDS2 (G) \$	SDS/LGSS (H) \$	LDS/LGSS (I) \$	MLDS (J) \$
<u>PURCHASED GAS EXPENSES</u>										
1		GAS PURCHASED COST		124,134,259	90,195,150	14,478,538	16,218,817	2,742,911	226,707	272,136
2	807.00	PURCHASED GAS EXPENSE	4	(1,284,339)	(933,175)	(149,805)	(167,812)	(28,384)	(2,350)	(2,813)
3	807.00	GAS PROCUREMENT EXPENSE	4	<u>2,387,896</u>	<u>1,734,998</u>	<u>278,524</u>	<u>312,003</u>	<u>52,773</u>	<u>4,370</u>	<u>5,230</u>
4		TOTAL PURCHASED GAS		<u>125,237,816</u>	<u>90,996,972</u>	<u>14,607,257</u>	<u>16,363,008</u>	<u>2,767,300</u>	<u>228,727</u>	<u>274,553</u>
<u>UNDERGROUND STORAGE OPERATIONS EXPENSES</u>										
5	816.00	WELLS	25	7,627	5,591	929	941	144	12	11
6	817.00	LINES	25	12,342	9,048	1,503	1,522	233	19	17
7	818.00	COMPRESSOR STATION	25	150,786	110,540	18,358	18,600	2,844	235	210
8	820.00	M & R	25	5,229	3,833	637	645	99	8	7
9	821.00	PURIFICATION	25	1,199	879	146	148	23	2	2
10	823.00	GAS LOSSES	25	2,053	1,505	250	253	39	3	3
11	825.00	STORAGE WELL ROYALTIES	25	<u>10,586</u>	<u>7,761</u>	<u>1,289</u>	<u>1,306</u>	<u>200</u>	<u>17</u>	<u>15</u>
12		TOTAL UNDERGROUND STORAGE OPERATIONS		<u>189,822</u>	<u>139,156</u>	<u>23,111</u>	<u>23,415</u>	<u>3,580</u>	<u>296</u>	<u>264</u>
<u>UNDERGROUND STORAGE MAINTENANCE EXPENSES</u>										
13	832.00	WELLS	25	2,871	2,105	350	354	54	5	4
14	834.00	COMPRESSOR STATION	25	3,275	2,401	399	404	62	5	5
15	836.00	PURIFICATION	25	6,551	4,802	798	808	124	10	9
16	840.00	OTHER STORAGE - OPERATION SUPERV - ENG	25	<u>6</u>	<u>5</u>	<u>1</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>
16		TOTAL UNDERGROUND STORAGE MAINTENANCE		<u>12,703</u>	<u>9,313</u>	<u>1,547</u>	<u>1,567</u>	<u>240</u>	<u>20</u>	<u>18</u>
17		TOTAL UNDERGROUND STORAGE		<u>202,525</u>	<u>148,469</u>	<u>24,657</u>	<u>24,982</u>	<u>3,820</u>	<u>316</u>	<u>282</u>
<u>DISTRIBUTION OPERATIONS EXPENSES</u>										
18	870.00	SUPERVISION & ENGINEERING	18	7,545,679	5,126,459	642,515	745,438	389,131	640,855	1,283
19	871.00	LOAD DISPATCHING	13	196,090	111,618	18,707	25,666	14,575	25,474	49
20	874.00	MAINS & SERVICES	14	16,897,282	11,066,368	1,519,066	1,718,454	947,093	1,642,923	3,380
21	875.00	M & R - GENERAL	13	467,159	265,916	44,567	61,146	34,724	60,689	117
22	876.00	M & R - INDUSTRIAL	17	295,774	0	11,855	54,488	122,190	107,242	0
23	878.00	METERS & HOUSE REGULATORS	23	2,644,529	2,028,592	118,369	466,786	23,801	6,611	370
24	879.00	CUSTOMER INSTALLATIONS	15	6,208,923	5,638,137	457,349	96,176	12,853	4,408	0
25	880.00	OTHER	18	6,561,473	4,457,799	558,709	648,208	338,375	557,266	1,116
26	881.00	RENTS	18	<u>417,833</u>	<u>283,872</u>	<u>35,579</u>	<u>41,278</u>	<u>21,548</u>	<u>35,487</u>	<u>71</u>
27		TOTAL DISTRIBUTION OPERATIONS		<u>41,234,742</u>	<u>28,978,760</u>	<u>3,406,715</u>	<u>3,857,639</u>	<u>1,904,289</u>	<u>3,080,954</u>	<u>6,385</u>
<u>DISTRIBUTION MAINTENANCE EXPENSES</u>										
28	885.00	SUPERVISION & ENGINEERING	18	70,565	47,941	6,009	6,971	3,639	5,993	12
29	886.00	STRUCTURES AND IMPROVEMENTS	13	167,094	95,113	15,941	21,871	12,420	21,707	42
30	887.00	MAINS	13	15,793,235	8,989,825	1,506,675	2,067,177	1,173,911	2,051,699	3,948
31	889.00	M & R - GENERAL	13	967,327	550,622	92,283	126,613	71,901	125,666	242
32	890.00	M & R - INDUSTRIAL	17	178,953	0	7,172	32,967	73,929	64,885	0
33	892.00	SERVICES	15	4,367,301	3,965,815	321,695	67,650	9,040	3,101	0
34	893.00	METERS & HOUSE REGULATORS	23	269,059	206,393	12,043	47,492	2,422	673	38
35	894.00	OTHER EQUIPMENT	18	<u>1,088,055</u>	<u>739,214</u>	<u>92,648</u>	<u>107,489</u>	<u>56,111</u>	<u>92,409</u>	<u>185</u>
36		TOTAL DISTRIBUTION MAINTENANCE		<u>22,901,589</u>	<u>14,594,923</u>	<u>2,054,466</u>	<u>2,478,229</u>	<u>1,403,374</u>	<u>2,366,132</u>	<u>4,467</u>
37		TOTAL DISTRIBUTION		<u>64,136,331</u>	<u>43,573,683</u>	<u>5,461,181</u>	<u>6,335,868</u>	<u>3,307,663</u>	<u>5,447,085</u>	<u>10,851</u>

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**OTHER O&M EXPENSES**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017**

**ALLOCATED COST OF SERVICE  
PEAK & AVERAGE**

111, SCHEDULE 2  
PAGE 8 OF 13  
WITNESS: M. P. BALMERT

LINE NO.	ACCT NO.	ACCOUNT TITLE	ALLOC FACTOR	TOTAL COMPANY	RSS/RDS	SGSS1/SCD1/SGDS1	SGSS2/SCD2/SGDS2	SDS/LGSS	LDS/LGSS	MLDS
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
				\$	\$	\$	\$	\$	\$	\$
<b>CUSTOMER ACCOUNTS EXPENSES</b>										
1	901.00	SUPERVISION	6	0	0	0	0	0	0	0
2	902.00	METER READING	6	863,552	787,335	62,703	12,219	1,088	190	17
3	903.00	CUSTOMER RECORDS AND COLLECTION EXPENS	6	10,353,303	9,439,521	751,753	146,499	13,045	2,278	207
4	903.00	INTEREST ON CUSTOMER DEPOSITS	9	97,862	70,740	24,796	2,326	0	0	0
5	903.00	RESIDENTIAL CUSTOMER PAYMENT OPTIONS		516,954	516,954	0	0	0	0	0
6	904.00	UNCOLLECTIBLES-DIS REVENUE	7	3,984,711	3,725,585	127,830	131,296	0	0	0
7	904.00	UNCOLLECTIBLES-GMB/GTS REVENUE	8	340,436	0	575	16,212	155,212	153,884	14,554
8	904.00	UNCOLLECTIBLES-UNBUNDLED GAS	Direct	1,103,635	1,010,792	44,239	48,604	0	0	0
9	904.00	DIRECT USP UNCOLLECTIBLES		10,878,013	10,878,013	0	0	0	0	0
10	905.00	MISCELLANEOUS	6	19,056	17,374	1,384	270	24	4	0
11	921.00	OFFICE SUPPLIES & EXPENSES	6	0	0	0	0	0	0	0
12		TOTAL CUSTOMER ACCOUNTS		<u>28,157,522</u>	<u>26,446,313</u>	<u>1,013,280</u>	<u>357,426</u>	<u>169,369</u>	<u>156,356</u>	<u>14,778</u>
<b>CUST SERVICE &amp; INFORMATION EXPENSES</b>										
13	907.00	SUPERVISION	6	250	228	18	4	0	0	0
14	908.00	CUSTOMER ASSISTANCE	6	696,933	635,436	50,604	9,862	878	153	0
15	908.00	DIRECT USP/LIURP/HEEP		10,781,262	10,781,262	0	0	0	0	0
16	909.00	INFORMATIONAL & INSTRUCTIONAL EXPENSES	6	233,383	212,785	16,946	3,302	294	51	5
17	910.00	MISCELLANEOUS	6	927,678	845,801	67,359	13,127	1,169	204	19
18	921.00	OFFICE SUPPLIES & EXPENSES	6	0	0	0	0	0	0	0
19	931.00	RENTS - GENERAL	6	0	0	0	0	0	0	0
20	932.00	MAINTENANCE	6	0	0	0	0	0	0	0
21		TOTAL CUST SERVICE & INFORMATION		<u>12,639,506</u>	<u>12,475,511</u>	<u>134,927</u>	<u>26,294</u>	<u>2,341</u>	<u>409</u>	<u>23</u>
<b>SALES EXPENSES</b>										
22	912.00	DEMONSTRATION	6	669,089	610,035	48,583	9,468	843	147	13
23	913.00	ADVERTISING	6	29,481	26,879	2,141	417	37	7	1
24		TOTAL SALES		<u>698,570</u>	<u>636,914</u>	<u>50,723</u>	<u>9,885</u>	<u>880</u>	<u>154</u>	<u>14</u>
<b>ADMINISTRATIVE AND GENERAL EXPENSES</b>										
25	920.00	SALARIES	19	13,351,627	9,645,883	1,110,455	1,120,736	560,635	911,649	2,270
26	921.00	OFFICE SUPPLIES & EXPENSES	19	2,852,186	2,060,562	237,216	239,413	119,763	194,747	485
27	922.00	ADMIN. EXPENSE TRANSFERRED	19	0	0	0	0	0	0	0
28	923.00	OUTSIDE SERVICES EMPLOYED	19	35,420,414	25,589,478	2,945,916	2,973,190	1,487,303	2,418,506	6,022
29	923.00	MULTIFAMILY HOUSE LINE REIMBURSEMENT		357,403	357,403	0	0	0	0	0
30	924.00	PROPERTY INSURANCE	19	192,093	138,778	15,976	16,124	8,066	13,116	33
31	925.00	INJURIES AND DAMAGES	19	4,020,041	2,904,279	334,347	337,442	168,802	274,488	683
32	926.00	EMPLOYEE PENSIONS & BENEFITS	24	10,876,178	7,745,688	894,457	973,418	483,229	777,756	1,631
33	928.00	REGULATORY COMMISSION EXPENSES	19	2,460,000	1,777,227	204,598	206,492	103,295	167,969	418
34	930.00	MISCELLANEOUS GENERAL	19	837,506	605,056	69,655	70,300	35,167	57,185	142
35	931.00	RENTS-GENERAL	19	4,214,959	3,045,097	350,558	353,804	176,986	287,797	717
36	932.00	MAINTENANCE	19	1,253,619	905,677	104,264	105,229	52,640	85,597	213
37		TOTAL ADMINISTRATIVE & GENERAL		<u>75,836,026</u>	<u>54,775,127</u>	<u>6,267,442</u>	<u>6,396,147</u>	<u>3,195,885</u>	<u>5,188,811</u>	<u>12,614</u>
38		TOTAL O & M EXPENSES		<u>306,908,296</u>	<u>229,052,990</u>	<u>27,559,467</u>	<u>29,513,609</u>	<u>9,447,258</u>	<u>11,021,857</u>	<u>313,116</u>

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**TAXES OTHER THAN INCOME TAXES**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017**

ALLOCATED COST OF SERVICE  
 PEAK & AVERAGE

111, SCHEDULE 2

PAGE 9 OF 13

WITNESS: M. P. BALMERT

LINE NO.	ACCT NO. (A)	ACCOUNT TITLE (B)	ALLOC FACTOR (C)	TOTAL COMPANY (D)	RSS/RDS (E)	SGSS1/SCD1/SGDS1 (F)	SGSS2/SCD2/SGDS2 (G)	SDS/LGSS (H)	LDS/LGSS (I)	MLDS (J)
				\$	\$	\$	\$	\$	\$	\$
		<u>FEDERAL TAXES</u>								
1	408.00	FEDERAL/STATE UNEMPLOYMENT	24	164,608	117,229	13,537	14,732	7,314	11,771	25
2	408.00	FICA	24	<u>2,446,225</u>	<u>1,742,128</u>	<u>201,178</u>	<u>218,937</u>	<u>108,686</u>	<u>174,930</u>	<u>367</u>
3		TOTAL FEDERAL TAXES		<u>2,610,833</u>	<u>1,859,357</u>	<u>214,715</u>	<u>233,670</u>	<u>115,999</u>	<u>186,701</u>	<u>392</u>
		<u>STATE TAXES</u>								
4	408.00	PA PROPERTY TAXES	11	463,359	304,191	40,502	49,491	25,503	43,431	241
5	408.00	PA STATE UNEMPLOYMENT	24	0	0	0	0	0	0	0
6	408.00	STATE CAPITAL STOCK TAX	11	0	0	0	0	0	0	0
7	408.00	LICENSE AND FRANCHISE TAX	11	7,343	4,821	642	784	404	688	4
8	408.00	STATE SALES AND USE TAX	19	0	0	0	0	0	0	0
9	408.00	OTHER	19	<u>8,749</u>	<u>6,321</u>	<u>728</u>	<u>734</u>	<u>367</u>	<u>597</u>	<u>2</u>
10		TOTAL STATE TAXES		<u>479,451</u>	<u>315,332</u>	<u>41,872</u>	<u>51,010</u>	<u>26,275</u>	<u>44,716</u>	<u>246</u>
11		TOTAL TAXES OTHER THAN INCOME		<u>3,090,284</u>	<u>2,174,689</u>	<u>256,587</u>	<u>284,680</u>	<u>142,274</u>	<u>231,417</u>	<u>638</u>

COLUMBIA GAS OF PENNSYLVANIA, INC.  
 RATE BASE  
 FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017

ALLOCATED COST OF SERVICE  
 PEAK & AVERAGE

111, SCHEDULE 2  
 PAGE 10 OF 13  
 WITNESS: M. P. BALMERT

LINE NO.	ACCT NO. (A)	ACCOUNT TITLE (B)	ALLOC FACTOR (C)	TOTAL COMPANY (D) \$	RSS/RDS (E) \$	SGSS1/SCD1/SGDS1 (F) \$	SGSS2/SCD2/SGDS2 (G) \$	SDS/LGSS (H) \$	LDS/LGSS (I) \$	MLDS (J) \$
1	101-107	GROSS PLANT [PAGE 3]		2,211,566,200	1,452,284,523	193,513,692	236,305,458	121,505,860	206,743,784	1,212,883
2	117.00	GAS STORED UNDERGROUND - NON CURRENT	25	3,794,693	2,781,851	462,004	468,075	71,568	5,920	5,275
3	108-111	DEPRECIATION RESERVE [PAGE 4]		(421,089,299)	(291,106,776)	(34,789,871)	(42,481,744)	(19,889,074)	(32,510,779)	(311,056)
4	117.00	GAS LOST-UNDERGROUND STORAGE	25	<u>(163,467)</u>	<u>(119,836)</u>	<u>(19,902)</u>	<u>(20,164)</u>	<u>(3,083)</u>	<u>(255)</u>	<u>(227)</u>
5		NET PLANT		1,794,108,127	1,163,839,762	159,165,923	194,271,626	101,685,271	174,238,670	906,875
<u>WORKING CAPITAL</u>										
6	154.00	MATERIALS & SUPPLIES	11	738,718	484,961	64,571	78,903	40,659	69,240	384
7	164.00	GAS STORED UNDERGROUND - FSS	25	48,336,766	35,435,201	5,885,001	5,962,340	911,631	75,405	67,188
8	165.00	PREPAYMENTS	19	2,175,574	1,571,744	180,942	182,618	91,352	148,548	370
9		CASH WORKING CAPITAL - GAS PURCHASES	4	0	0	0	0	0	0	0
10		CASH WORKING CAPITAL - ALL OTHER	19	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
11		TOTAL WORKING CAPITAL		51,251,058	37,491,906	6,130,514	6,223,861	1,043,642	293,193	67,942
<u>DEFERRED INCOME TAXES</u>										
12	190.00	ACCUMULATED DEF INCOME TAX	12	41,598,839	27,317,126	3,639,898	4,444,836	2,285,440	3,888,660	22,879
13	282.00	ACCUMULATED DEF INCOME TAX	12	(389,606,268)	(255,846,644)	(34,090,549)	(41,629,430)	(21,404,968)	(36,420,394)	(214,283)
14	283.00	ACCUMULATED DEF INCOME TAX	12	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
15		TOTAL DEFERRED INCOME TAXES		(348,007,429)	(228,529,519)	(30,450,650)	(37,184,594)	(19,119,528)	(32,531,734)	(191,404)
16	235.00	CUSTOMER DEPOSITS	9	(3,164,548)	(2,287,494)	(801,833)	(75,221)	0	0	0
17	252.00	CUSTOMER ADVANCES	5	<u>(96,133)</u>	<u>(54,735)</u>	<u>(9,173)</u>	<u>(12,586)</u>	<u>(7,148)</u>	<u>(12,492)</u>	<u>0</u>
18		RATE BASE		<u>1,494,091,075</u>	<u>970,459,921</u>	<u>134,034,781</u>	<u>163,223,086</u>	<u>83,602,238</u>	<u>141,987,637</u>	<u>783,413</u>

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**STATE/FEDERAL INCOME TAXES**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017**

ALLOCATED COST OF SERVICE  
 PEAK & AVERAGE

111, SCHEDULE 2  
 PAGE 11 OF 13  
 WITNESS: M. P. BALMERT

LINE NO.	ACCT NO. (A)	ALLOC FACTOR (B)	TOTAL COMPANY (C) \$	RSS/RDS (D) \$	SGSS1/SCD1/SGDS1 (E) \$	SGSS2/SCD2/SGDS2 (F) \$	SDS/LGSS (G) \$	LDS/LGSS (H) \$	MLDS (I) \$
<b>STATE INCOME TAX</b>									
1	OPERATING INCOME BEFORE TAXES (PG. 2, LINE 8)		120,301,333	86,828,731	10,864,118	13,212,617	7,077,117	1,019,311	1,299,440
2	STATUTORY ADJUSTMENTS	12	(153,871,920)	(101,044,612)	(13,463,793)	(16,441,215)	(8,453,723)	(14,383,947)	(84,630)
3	INTEREST ON DEBT		(35,858,186)	(23,291,038)	(3,216,835)	(3,917,354)	(2,006,454)	(3,407,703)	(18,802)
4	PA BONUS DEPRECIATION ADJUSTMENT	12	<u>76,385,438</u>	<u>50,160,789</u>	<u>6,683,726</u>	<u>8,161,784</u>	<u>4,196,616</u>	<u>7,140,511</u>	<u>42,012</u>
5	STATE TAXABLE INCOME		6,956,665	12,653,870	867,216	1,015,832	813,555	(9,631,829)	1,238,021
6	NET OPERATING LOSS DEDUCTION	12	(5,000,000)	(3,283,400)	(437,500)	(534,250)	(274,700)	(467,400)	(2,750)
	STATE TAXABLE INCOME		1,956,665	9,370,470	429,716	481,582	538,855	(10,099,229)	1,235,271
7	STATE NET INCOME TAX @ 9.99%		195,471	936,110	42,929	48,110	53,832	(1,008,913)	123,404
8	DEFERRED INCOME TAXES	12	(94,628)	(62,140)	(8,280)	(10,111)	(5,199)	(8,846)	(52)
9	STATE INCOME TAX		100,843	873,970	34,649	37,999	48,633	(1,017,759)	123,352
<b>FEDERAL INCOME TAX</b>									
10	OPERATING INCOME BEFORE TAXES (PG. 2, LINE 8)		120,301,333	86,828,731	10,864,118	13,212,617	7,077,117	1,019,311	1,299,440
11	STATE NET INCOME TAX (LINE 7)		(195,471)	(936,110)	(42,929)	(48,110)	(53,832)	1,008,913	(123,404)
12	STATUTORY ADJUSTMENTS (LINES 2 & 3)	12	(189,730,106)	(124,335,650)	(16,680,628)	(20,358,569)	(10,460,177)	(17,791,650)	(103,432)
13	FEDERAL TAXABLE INCOME		(69,624,244)	(38,443,029)	(5,859,439)	(7,194,062)	(3,436,892)	(15,763,427)	1,072,605
14	FEDERAL INCOME TAX @ 35%		(24,368,485)	(13,455,060)	(2,050,804)	(2,517,922)	(1,202,912)	(5,517,199)	375,412
15	DEFERRED INCOME TAXES	12	56,006,594	36,778,410	4,900,577	5,984,305	3,077,002	5,235,496	30,804
16	TAX REFUND AMORTIZATION	12	0	0	0	0	0	0	0
17	FLOW BACK OF EXCESS DEFERRED TAXES	12	(89,482)	(58,761)	(7,830)	(9,561)	(4,916)	(8,365)	(49)
18	EFFECT OF CNIT DEFERRED TAX ON FIT	12	33,120	21,749	2,898	3,539	1,820	3,096	18
19	FEDERAL INCOME TAX		31,581,746	23,286,338	2,844,842	3,460,361	1,870,994	(286,972)	406,184
20	STATE NET INCOME TAX (LINE 9)		100,843	873,970	34,649	37,999	48,633	(1,017,759)	123,352
21	TOTAL INCOME TAXES		<u>31,682,589</u>	<u>24,160,308</u>	<u>2,879,490</u>	<u>3,498,360</u>	<u>1,919,626</u>	<u>(1,304,730)</u>	<u>529,536</u>



**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**ALLOCATION FACTORS**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017**

**ALLOCATED COST OF SERVICE  
PEAK & AVERAGE**

**111, SCHEDULE 2**  
**PAGE 12 OF 13**  
**WITNESS: M. P. BALMERT**

<u>LINE NO.</u>	<u>DESCRIPTION (A)</u>	<u>ALLOC FACTOR (B)</u>	<u>TOTAL COMPANY (C)</u>	<u>RSS/RDS (D)</u>	<u>SGSS1/SCD1/SGDS1 (E)</u>	<u>SGSS2/SCD2/SGDS2 (F)</u>	<u>SDS/LGSS (G)</u>	<u>LDS/LGSS (H)</u>	<u>MLDS (I)</u>
1	DESIGN DAY	1	769,993,000	441,900,000	82,752,000	109,891,000	63,707,000	71,743,000	0
2	PERCENT		100.000%	57.390%	10.747%	14.272%	8.274%	9.317%	0.000%
3	THROUGHPUT EXCLUDING TRANSPORTATION	2	36,975,011	26,849,669	4,337,145	4,765,071	884,981	73,145	65,000
4	PERCENT		100.000%	72.616%	11.730%	12.887%	2.393%	0.198%	0.176%
5	THROUGHPUT EXCLUDING MDS	3	77,638,044	34,403,669	5,872,345	9,081,554	7,225,995	21,054,482	0
6	PERCENT		100.000%	44.313%	7.564%	11.697%	9.307%	27.119%	0.000%
7	GAS PURCHASED EXPENSE	4	124,134,259	90,195,150	14,478,538	16,218,817	2,742,911	226,707	272,136
8	PERCENT		100.000%	72.658%	11.664%	13.066%	2.210%	0.183%	0.219%
9	PEAK & AVERAGE MAINS	5							
10	PERCENT		100.000%	56.937%	9.542%	13.092%	7.435%	12.994%	0.000%
11	AVERAGE NO. OF CUSTOMERS	6	426,388	388,751	30,960	6,035	537	95	10
12	PERCENT		100.000%	91.174%	7.261%	1.415%	0.126%	0.022%	0.002%
13	DISTRIBUTION UNCOLLECTIBLES	7	11,699,639	10,938,832	375,282	385,525	0	0	0
14	PERCENT		100.000%	93.497%	3.208%	3.295%	0.000%	0.000%	0.000%
15	CURRENT GMB/GTS REVENUE	8	38,556,457	0	64,979	1,836,049	17,578,831	17,428,134	1,648,464
16	PERCENT		100.000%	0.000%	0.169%	4.762%	45.592%	45.202%	4.275%
17	CUSTOMER DEPOSITS	9	2,632,633	1,903,023	667,045	62,565	0	0	0
18	PERCENT		100.000%	72.285%	25.338%	2.377%	0.000%	0.000%	0.000%
19	FORFEITED DISCOUNTS	10	1,192,278	871,157	106,562	119,793	48,090	42,669	4,007
20	PERCENT		100.000%	73.067%	8.938%	10.047%	4.033%	3.579%	0.336%
21	DIST. PLANT EXCL ACCTS 375.70, 375.71, & 387	11	2,120,695,852	1,392,215,296	185,373,627	226,508,296	116,720,256	198,773,913	1,104,464
22	PERCENT		100.000%	65.649%	8.741%	10.681%	5.504%	9.373%	0.052%
23	GROSS PLANT	12	2,211,566,200	1,452,284,523	193,513,692	236,305,458	121,505,860	206,743,784	1,212,883
24	PERCENT		100.000%	65.668%	8.750%	10.685%	5.494%	9.348%	0.055%
25	MAINS - ACCOUNT 376	13	1,448,157,780	824,334,671	138,149,208	189,546,157	107,644,033	188,127,311	356,401
26	PERCENT		100.000%	56.922%	9.540%	13.089%	7.433%	12.991%	0.025%

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**ALLOCATION FACTORS (CONT.)**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017**

**ALLOCATED COST OF SERVICE  
PEAK & AVERAGE**

**111, SCHEDULE 2  
PAGE 13 OF 13  
WITNESS: M. P. BALMERT**

<u>LINE NO.</u>	<u>DESCRIPTION</u> (A)	<u>ALLOC FACTOR</u> (B)	<u>TOTAL COMPANY</u> (C)	<u>RSS/RDS</u> (D)	<u>SGSS1/SCD1/SGDS1</u> (E)	<u>SGSS2/SCD2/SGDS2</u> (F)	<u>SDS/LGSS</u> (G)	<u>LDS/LGSS</u> (H)	<u>MLDS</u> (I)
27	COMPOSITE DIRECT PLANT - ACCTS 376 & 380	14	1,938,540,112	1,269,600,374	174,267,868	197,141,569	108,659,042	188,475,455	395,804
28	PERCENT		100.000%	65.492%	8.990%	10.170%	5.605%	9.723%	0.020%
29	SERVICES	15	357,295,382	324,449,571	26,316,820	5,535,815	741,276	251,900	0
30	PERCENT		100.000%	90.807%	7.366%	1.549%	0.207%	0.071%	0.000%
31	METERS	16	26,466,882	19,716,446	1,065,916	5,338,167	267,092	75,039	4,221
32	PERCENT		100.000%	74.495%	4.027%	20.169%	1.009%	0.284%	0.016%
33	INDUSTRIAL M & R	17	5,159,754	0	206,786	950,547	2,131,616	1,870,805	0
34	PERCENT		100.000%	0.000%	4.008%	18.422%	41.312%	36.258%	0.000%
35	OTHER DISTRIBUTION O & M EXPENSES	18	48,452,726	32,918,399	4,125,722	4,786,484	2,498,859	4,115,077	8,185
36	PERCENT		100.000%	67.939%	8.515%	9.879%	5.157%	8.493%	0.017%
37	O & M EXCL GAS PUR, UNCOLLECTIBLES, & A & G	19	79,849,954	57,687,061	6,640,843	6,702,533	3,353,250	5,452,455	13,812
38	PERCENT		100.000%	72.245%	8.317%	8.394%	4.199%	6.828%	0.017%
39	CUSTOMER/DEMAND MAINS	20							
40	PERCENT		100.000%	75.390%	8.980%	7.650%	4.019%	3.961%	0.000%
41	HOUSE REGULATORS (GPA 383)	21	2,865,715	2,596,164	208,844	53,359	6,232	1,116	0
42	PERCENT		100.00%	90.594%	7.288%	1.862%	0.217%	0.039%	0.000%
43	AVERAGE - ALLOCATORS 5 & 20	22							
44	PERCENT		100.00%	66.163%	9.261%	10.371%	5.727%	8.478%	0.000%
45	METERS AND HOUSE REGULATORS	23	115,692,095	88,746,523	5,177,816	20,420,902	1,041,309	289,581	15,965
46	PERCENT		100.000%	76.709%	4.476%	17.651%	0.900%	0.250%	0.014%
47	LABOR	24	27,414,523	19,523,969	2,254,483	2,453,599	1,218,089	1,960,321	4,063
48	PERCENT		100.000%	71.217%	8.224%	8.950%	4.443%	7.151%	0.015%
49	SALES AND CHOICE TRANSPORTATION	25	46,929,035	34,403,669	5,713,732	5,788,507	884,981	73,145	65,000
50	PERCENT		100.000%	73.309%	12.175%	12.335%	1.886%	0.156%	0.139%

COLUMBIA GAS OF PENNSYLVANIA, INC.  
ALLOCATED COST OF SERVICE - TABLE OF CONTENTS

DOCKET NO.: R-2015-2468056

WITNESS: M. P. BALMERT

STUDY TYPE: AVERAGE STUDY- ALLOCATORS 5 & 20

FORECASTED TEST YEAR: DECEMBER 31, 2017

111, SCHEDULE 3

<u>PAGE</u>	<u>DESCRIPTION</u>
1	RATE OF RETURN BY CLASS - PROFORMA @ PROPOSED RATES
2	RATE OF RETURN BY CLASS - CURRENT @ CURRENT RATES
3	GROSS PLANT (Accounts 101 & 106)
4	DEPRECIATION RESERVE
5	DEPRECIATION AND AMORTIZATION EXPENSE
6	OPERATING REVENUE @ PROPOSED & CURRENT RATES
7	PRODUCTION & DISTRIBUTION O&M EXPENSES
8	OTHER O&M EXPENSES
9	TAXES OTHER THAN INCOME TAXES
10	RATE BASE
11	STATE/FEDERAL INCOME TAXES
12	ALLOCATION FACTORS
13	ALLOCATION FACTORS (CONT.)

**COLUMBIA GAS OF PENNSYLVANIA, INC.  
 RATE OF RETURN BY CLASS - PROFORMA @ PROPOSED RATES  
 FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017**

ALLOCATED COST OF SERVICE  
 AVERAGE STUDY- ALLOCATORS 5 & 20

111, SCHEDULE 3

PAGE 1 OF 13

WITNESS: M. P. BALMERT

LINE NO.	ACCOUNT TITLE (A)	ALLOC FACTOR (B)	TOTAL COMPANY (C) \$	RSS/RDS (D) \$	SGSS1/SCD1/SGDS1 (E) \$	SGSS2/SCD2/SGDS2 (F) \$	SDS/LGSS (G) \$	LDS/LGSS (H) \$	MLDS (I) \$
1	TOTAL REVENUE [PAGE 6]		547,467,040	402,890,891	48,266,424	53,182,474	21,688,793	19,785,442	1,653,016
2	PRODUCTS PURCHASED [PAGE 7]		124,134,259	90,195,150	14,478,538	16,218,817	2,742,911	226,707	272,136
3	OPERATING & MAINTENANCE EXPENSES [PAGES 7 & 8]		183,479,983	146,600,174	12,916,408	11,221,328	5,397,987	7,303,101	40,985
4	DEPRECIATION & AMORTIZATION [PAGE 5]		61,910,132	45,352,984	5,192,050	5,316,687	2,486,578	3,522,460	39,372
5	TAXES OTHER THAN INCOME [PAGE 9]		3,090,284	2,330,211	251,847	238,801	113,510	155,277	638
6	TOTAL EXPENSES & TAXES OTHER THAN INCOME		372,614,658	284,478,519	32,838,843	32,995,633	10,740,986	11,207,546	353,131
7	OPERATING INCOME BEFORE TAXES		174,852,382	118,412,372	15,427,582	20,186,840	10,947,807	8,577,896	1,299,885
8	INCOME TAXES		53,444,203	35,368,149	4,742,346	6,690,955	3,721,329	2,391,711	529,713
9	INVESTMENT TAX CREDIT	12	(360,240)	(260,122)	(30,804)	(31,543)	(15,429)	(22,144)	(198)
10	NET INCOME TAXES		53,083,963	35,108,027	4,711,542	6,659,412	3,705,900	2,369,567	529,515
11	OPERATING INCOME		121,768,419	83,304,345	10,716,040	13,527,428	7,241,908	6,208,329	770,370
12	RATE BASE [PAGE 10]		1,494,091,075	1,070,399,334	130,990,065	133,748,886	65,101,516	93,067,862	783,413
13	RATE OF RETURN EARNED ON RATE BASE		8.150%	7.783%	8.181%	10.114%	11.124%	6.671%	98.335%
14	UNITIZED RETURN		1.00	0.95	1.00	1.24	1.36	0.82	12.07

COLUMBIA GAS OF PENNSYLVANIA, INC.  
 RATE OF RETURN BY CLASS - CURRENT @ CURRENT RATES  
 FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017

ALLOCATED COST OF SERVICE  
 AVERAGE STUDY- ALLOCATORS 5 & 20

111, SCHEDULE 3  
 PAGE 2 OF 13  
 WITNESS: M. P. BALMERT

LINE NO.	ACCOUNT TITLE (A)	ALLOC FACTOR (B)	TOTAL COMPANY (C) \$	RSS/RDS (D) \$	SGSS1/SCD1/SGDS1 (E) \$	SGSS2/SCD2/SGDS2 (F) \$	SDS/LGSS (G) \$	LDS/LGSS (H) \$	MLDS (I) \$
1	TOTAL REVENUE [PAGE 6]		492,210,045	359,711,096	43,984,893	49,418,307	19,837,879	17,605,305	1,652,566
2	PRODUCTS PURCHASED [PAGE 7]		124,134,259	90,195,150	14,478,538	16,218,817	2,742,911	226,707	272,136
3	OPERATING & MAINTENANCE EXPENSES [PAGES 7 & 8]		182,774,037	146,048,522	12,861,708	11,173,238	5,374,340	7,275,248	40,980
4	DEPRECIATION & AMORTIZATION [PAGE 5]		61,910,132	45,352,984	5,192,050	5,316,687	2,486,578	3,522,460	39,372
5	TAXES OTHER THAN INCOME [PAGE 9]		3,090,284	2,330,211	251,847	238,801	113,510	155,277	638
6	TOTAL EXPENSES & TAXES OTHER THAN INCOME		371,908,712	283,926,868	32,784,143	32,947,544	10,717,339	11,179,693	353,125
7	OPERATING INCOME BEFORE TAXES		120,301,333	75,784,228	11,200,750	16,470,763	9,120,540	6,425,612	1,299,440
8	INCOME TAXES [PAGE 11]		31,682,589	18,362,845	3,056,170	5,208,530	2,992,392	1,533,118	529,536
9	INVESTMENT TAX CREDIT	12	(360,240)	(260,122)	(30,804)	(31,543)	(15,429)	(22,144)	(198)
10	NET INCOME TAXES		31,322,349	18,102,723	3,025,366	5,176,987	2,976,962	1,510,974	529,338
11	OPERATING INCOME		88,978,984	57,681,506	8,175,384	11,293,776	6,143,577	4,914,638	770,102
12	RATE BASE [PAGE 10]		1,494,091,075	1,070,399,334	130,990,065	133,748,886	65,101,516	93,067,862	783,413
13	RATE OF RETURN EARNED ON RATE BASE		5.955%	5.389%	6.241%	8.444%	9.437%	5.281%	98.301%
14	UNITIZED RETURN		1.00	0.90	1.05	1.42	1.58	0.89	16.51

COLUMBIA GAS OF PENNSYLVANIA, INC.  
GROSS PLANT (Accounts 101 & 106)  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017

ALLOCATED COST OF SERVICE  
AVERAGE STUDY- ALLOCATORS 5 & 20

111, SCHEDULE 3  
PAGE 3 OF 13  
WITNESS: M. P. BALMERT

LINE NO.	ACCT. NO. (A)	ACCOUNT TITLE (B)	ALLOC FACTOR (C)	TOTAL COMPANY (D) \$	RSS/RDS (E) \$	SGSS1/SCD1/SGDS1 (F) \$	SGSS2/SCD2/SGDS2 (G) \$	SDS/LGSS (H) \$	LDS/LGSS (I) \$	MLDS (J) \$
1	301-305	INTANGIBLE PLANT	11	36,463,839	26,329,444	3,114,377	3,189,492	1,564,299	2,247,266	18,961
2	350-362	UNDERGROUND STORAGE PLANT	25	5,882,069	4,312,086	716,142	725,553	110,936	9,176	8,176
<u>DISTRIBUTION PLANT</u>										
3	374.10	LAND - CITY GATE & M/L IND M&R	22	21,944	14,518	2,032	2,276	1,257	1,860	0
4	374.20	LAND - OTHER DISTRIBUTION	22	477,118	315,676	44,186	49,482	27,325	40,450	0
5	374.30	LAND RIGHTS - CITY GATE MAIN LINE	22	95,361	63,094	8,831	9,890	5,461	8,085	0
6	374.40	LAND RIGHTS - OTHER DISTRIBUTION	22	2,737,177	1,810,998	253,490	283,873	156,758	232,058	0
7	374.40	DIRECT - LAND RIGHTS-OTHER DISTRIBUTION		0	0	0	0	0	0	0
8	374.41	LAND RIGHTS - OTHER DISTRIBUTION LOC	22	13	11	1	0	0	1	0
9	374.50	RIGHTS OF WAY	22	3,238,374	2,142,606	299,906	335,852	185,462	274,549	0
10	374.50	DIRECT - RIGHTS OF WAY		1,246	0	0	0	0	0	1,246
11	375.20	M & R STRUCTURES - CITY GATE	22	743,068	491,636	68,816	77,064	42,556	62,997	0
12	375.31	M & R STRUCTURES - LOCAL GAS PURCH	22	946,925	626,514	87,695	98,206	54,230	80,280	0
13	375.40	M & R STRUCTURES - REGULATING	22	3,813,061	2,522,836	353,128	395,453	218,374	323,271	0
14	375.40	DIRECT - M & R STRUCTURES - REGULATING	22	27,124	0	0	0	0	0	27,124
15	375.60	M & R STRUCTURES - DIST. IND. M & R	17	87,670	0	3,514	16,151	36,218	31,787	0
16	375.70	M & R STRUCTURES - OTHER	11	7,821,943	5,647,990	668,072	684,185	335,561	482,066	4,067
17	375.71	M & R STRUCTURES - OTHER LEASED	11	4,517,569	3,262,001	385,846	395,152	193,804	278,418	2,349
18	375.80	M & R STRUCTURES - COMMUNICATION	22	16,515	10,927	1,530	1,713	946	1,400	0
19	376.00	MAINS	22	1,354,749,181	896,342,701	125,463,322	140,501,038	77,586,486	114,855,636	0
20	376.00	DIRECT - MAINS - MDS		226,885	0	0	0	0	0	226,885
21	376.08	MAINS-CSL REPLACEMENTS	22	23,785,876	15,737,449	2,202,810	2,466,833	1,362,217	2,016,567	0
22	376.30	MAINS-BARE STEEL	22	68,743,268	45,482,608	6,366,314	7,129,364	3,936,927	5,828,054	0
23	376.30	DIRECT - MAINS-BARE STEEL		129,516	0	0	0	0	0	129,516
24	376.80	MAINS-CAST IRON	22	523,053	346,068	48,440	54,246	29,955	44,345	0
25	378.10	M & R EQUIP - GENERAL	22	55,331	36,609	5,124	5,738	3,169	4,691	0
26	378.20	M & R EQUIP - GENERAL - REGULATING	22	46,736,190	30,922,065	4,328,239	4,847,010	2,676,582	3,962,294	0
27	378.20	DIRECT - M & R EQUIP-GEN-REG		291,035	0	0	0	0	0	291,035
28	378.30	M & R EQUIP - LOCAL GAS PURCHASES	22	461,790	305,534	42,766	47,892	26,447	39,151	0
29	379.10	M & R EQUIP - CITY GATE	22	141,567	93,665	13,111	14,682	8,108	12,002	0
30	379.11	M & R EQUIP - EXCHANGE GAS	22	(450)	(298)	(42)	(47)	(26)	(38)	0
31	380.00	SERVICES	15	490,342,928	445,265,703	36,118,660	7,595,412	1,015,010	348,144	0
32	380.00	DIRECT - SERVICES		39,403	0	0	0	0	0	39,403
33	380.12	CSL REPLACEMENT	15	0	0	0	0	0	0	0
34	381.00	METERS	16	37,714,590	28,095,484	1,518,767	7,606,656	380,540	107,109	6,034
35	381.10	AUTOMATIC METER READING	16	24,289,208	18,094,246	978,126	4,898,890	245,078	68,981	3,886
36	382.00	METER INSTALLATIONS	16	37,776,149	28,141,342	1,521,246	7,619,071	381,161	107,284	6,044
37	383.00	HOUSE REGULATORS	21	12,047,377	10,914,201	878,013	224,322	26,143	4,699	0
38	384.00	HOUSE REG INSTALLATIONS	21	3,864,772	3,501,252	281,665	71,962	8,387	1,507	0
39	385.00	IND M&R EQUIPMENT	17	5,047,477	0	202,303	929,846	2,085,214	1,830,114	0
40	385.00	DIRECT - IND M&R EQUIPMENT		373,291	0	0	0	0	0	373,291
41	385.10	IND M&R EQUIPMENT - LG VOLUME	17	1,151,820	0	46,165	212,188	475,840	417,627	0
42	387.10	OTHER EQUIP DISTRIBUTION	11	16,603	11,989	1,418	1,452	712	1,023	9
43	387.20	OTHER EQUIP ODORIZATION	11	117,248	84,661	10,014	10,256	5,030	7,226	61
44	387.42	OTHER EQUIP RADIO	11	121,945	88,053	10,415	10,667	5,232	7,516	63
45	387.44	OTHER EQUIP COMMUNICATION	11	635,499	458,875	54,278	55,587	27,263	39,166	331
46	387.46	OTHER EQUIP CUSTOMER INFO SERVICE	11	3,572,300	2,579,451	305,110	312,469	153,252	220,161	1,858
47	387.45	DIRECT - OTHER EQUIP CUSTOMER INFO SERVICE		56,078	0	0	0	0	0	56,078
48	387.50	GPS EQUIPMENT	11	4,304,405	3,108,082	367,639	376,506	184,659	265,281	2,238
49		TOTAL DISTRIBUTION PLANT		2,141,859,442	1,546,518,544	182,940,948	187,341,336	91,881,335	132,005,762	1,171,518
50	389-398	GENERAL PLANT	11	27,360,850	19,756,449	2,336,890	2,393,254	1,173,781	1,686,249	14,228
51		TOTAL GROSS PLANT		2,211,566,200	1,596,916,523	189,108,356	193,649,635	94,730,350	135,948,454	1,212,883

COLUMBIA GAS OF PENNSYLVANIA, INC.  
DEPRECIATION RESERVE  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017

ALLOCATED COST OF SERVICE  
AVERAGE STUDY- ALLOCATORS 5 & 20

111, SCHEDULE 3  
PAGE 4 OF 13  
WITNESS: M. P. BALMERT

LINE NO.	ACCT. NO.	ACCOUNT TITLE	ALLOC FACTOR	TOTAL COMPANY	RSS/RDS	SGSS1/SCD1/SGDS1	SGSS2/SCD2/SGDS2	SDS/LGSS	LDS/LGSS	MLDS
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
				\$	\$	\$	\$	\$	\$	\$
1	301-305	INTANGIBLE PLANT	11	9,799,828	7,076,162	837,003	857,191	420,413	603,963	5,096
2	350-362	UNDERGROUND STORAGE PLANT	25	1,458,480	1,069,197	177,570	179,904	27,507	2,275	2,027
DISTRIBUTION PLANT										
3	374.10	LAND - CITY GATE & M/L IND M&R	22	0	0	0	0	0	0	0
4	374.20	LAND - OTHER DISTRIBUTION	22	146,190	96,724	13,539	15,161	8,372	12,394	0
5	374.30	LAND RIGHTS - CITY GATE MAIN LINE	22	0	0	0	0	0	0	0
6	374.40	LAND RIGHTS - OTHER DISTRIBUTION	22	683,587	452,282	63,307	70,895	39,149	57,955	0
7	374.40	DIRECT - LAND RIGHTS-OTHER DISTRIBUTION	22	0	0	0	0	0	0	0
8	374.41	LAND RIGHTS - OTHER DISTRIBUTION LOC	22	0	0	0	0	0	0	0
9	374.50	RIGHTS OF WAY	22	1,646,725	1,089,522	152,503	170,782	94,308	139,609	0
10	374.50	DIRECT - RIGHTS OF WAY	22	753	0	0	0	0	0	753
11	375.20	M & R STRUCTURES - CITY GATE	22	0	0	0	0	0	0	0
12	375.31	M & R STRUCTURES - LOCAL GAS PURCH	22	0	0	0	0	0	0	0
13	375.40	M & R STRUCTURES - REGULATING	22	1,404,563	929,301	130,077	145,667	80,439	119,079	0
14	375.40	DIRECT - M & R STRUCTURES - REGULATING	22	1,797	0	0	0	0	0	1,797
15	375.60	M & R STRUCTURES - DIST. IND. M & R	17	74,808	0	2,998	13,781	30,905	27,124	0
16	375.70	M & R STRUCTURES - OTHER	11	2,587,833	1,868,597	221,027	226,358	111,018	159,488	1,346
17	375.71	M & R STRUCTURES - OTHER LEASED	11	1,080,296	780,049	92,268	94,494	46,345	66,579	562
18	375.80	M & R STRUCTURES - COMMUNICATION	22	6,866	4,543	636	712	393	582	0
19	376.00	MAINS	22	164,641,444	108,931,719	15,247,444	17,074,964	9,429,016	13,958,302	0
20	376.00	DIRECT - MAINS - MDS	22	38,767	0	0	0	0	0	38,767
21	376.08	MAINS-CSL REPLACEMENTS	22	0	0	0	0	0	0	0
22	376.30	MAINS-BARE STEEL	22	38,884,469	25,727,131	3,601,091	4,032,708	2,226,914	3,296,625	0
23	376.30	DIRECT - MAINS-BARE STEEL	22	118,266	0	0	0	0	0	118,266
24	376.80	MAINS-CAST IRON	22	316,848	209,636	29,343	32,860	18,146	26,862	0
25	378.10	M & R EQUIP - GENERAL	22	0	0	0	0	0	0	0
26	378.20	M & R EQUIP - GENERAL - REGULATING	22	11,246,689	7,441,147	1,041,556	1,166,394	644,098	953,494	0
27	378.20	DIRECT - M & R EQUIP-GEN-REG	22	16,589	0	0	0	0	0	16,589
28	378.30	M & R EQUIP - LOCAL GAS PURCHASES	22	0	0	0	0	0	0	0
29	379.10	M & R EQUIP - CITY GATE	22	98,046	64,870	9,080	10,168	5,615	8,312	0
30	379.11	M & R EQUIP - EXCHANGE GAS	22	0	0	0	0	0	0	0
31	380.00	SERVICES	15	122,253,501	111,014,737	9,005,193	1,893,707	253,065	86,800	0
32	380.00	DIRECT - SERVICES	15	24,113	0	0	0	0	0	24,113
33	380.12	CSL REPLACEMENT	15	0	0	0	0	0	0	0
34	381.00	METERS	16	16,508,949	12,298,342	664,815	3,329,690	166,575	46,885	2,641
35	381.10	AUTOMATIC METER READING	16	10,448,842	7,783,865	420,775	2,107,427	105,429	29,675	1,672
36	382.00	METER INSTALLATIONS	16	12,548,434	9,347,956	505,325	2,530,894	126,614	35,638	2,008
37	383.00	HOUSE REGULATORS	21	3,829,549	3,469,342	279,098	71,306	8,310	1,494	0
38	384.00	HOUSE REG INSTALLATIONS	21	3,044,466	2,758,104	221,881	56,688	6,607	1,187	0
39	385.00	IND M&R EQUIPMENT	17	3,180,306	0	127,467	585,876	1,313,848	1,153,115	0
40	385.00	DIRECT - IND M&R EQUIPMENT	17	85,568	0	0	0	0	0	85,568
41	385.10	IND M&R EQUIPMENT - LG VOLUME	17	0	0	0	0	0	0	0
42	387.10	OTHER EQUIP DISTRIBUTION	11	0	0	0	0	0	0	0
43	387.20	OTHER EQUIP ODORIZATION	11	0	0	0	0	0	0	0
44	387.42	OTHER EQUIP RADIO	11	0	0	0	0	0	0	0
45	387.44	OTHER EQUIP COMMUNICATION	11	0	0	0	0	0	0	0
46	387.46	OTHER EQUIP CUSTOMER INFO SERVICE	11	1,149,527	830,039	98,181	100,549	49,315	70,845	598
47	387.45	DIRECT - OTHER EQUIP CUSTOMER INFO SERVICE	11	2,097	0	0	0	0	0	2,097
48	387.50	GPS EQUIPMENT	11	811,351	585,852	69,298	70,969	34,807	50,004	422
49		TOTAL DISTRIBUTION PLANT		396,881,239	295,683,756	31,996,901	33,802,050	14,799,286	20,302,048	297,199
50	389-398	GENERAL PLANT	11	12,949,752	9,350,627	1,106,038	1,132,715	555,544	798,093	6,734
51		TOTAL DEPRECIATION RESERVE		421,089,299	313,179,742	34,117,512	35,971,860	15,802,750	21,706,380	311,056

COLUMBIA GAS OF PENNSYLVANIA, INC.  
DEPRECIATION AND AMORTIZATION EXPENSE  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017

ALLOCATED COST OF SERVICE  
AVERAGE STUDY- ALLOCATORS 5 & 20

111, SCHEDULE 3  
PAGE 5 OF 13  
WITNESS: M. P. BALMERT

LINE NO.	ACCT. NO. (A)	ACCOUNT TITLE (B)	ALLOC FACTOR (C)	TOTAL COMPANY (D) \$	RSS/RDS (E) \$	SGSS1/SCD1/SGDS1 (F) \$	SGSS2/SCD2/SGDS2 (G) \$	SDS/LGSS (H) \$	LDS/LGSS (I) \$	MLDS (J) \$
1	301-305	INTANGIBLE PLANT	11	4,748,209	3,428,540	405,545	415,326	203,698	292,632	2,469
2	350-362	UNDERGROUND STORAGE PLANT	25	288,254	211,316	35,095	35,556	5,437	450	401
DISTRIBUTION PLANT										
3	374.10	LAND - CITY GATE & M/L IND M&R	22	0	0	0	0	0	0	0
4	374.20	LAND - OTHER DISTRIBUTION	22	0	0	0	0	0	0	0
5	374.30	LAND RIGHTS - CITY GATE MAIN LINE	22	0	0	0	0	0	0	0
6	374.40	LAND RIGHTS - OTHER DISTRIBUTION	22	49,497	32,749	4,584	5,133	2,835	4,196	0
7	374.40	DIRECT - LAND RIGHTS-OTHER DISTRIBUTION	22	0	0	0	0	0	0	0
8	374.41	LAND RIGHTS - OTHER DISTRIBUTION LOC	22	0	0	0	0	0	0	0
9	374.50	RIGHTS OF WAY	22	41,861	27,696	3,877	4,341	2,397	3,549	0
10	374.50	DIRECT - RIGHTS OF WAY	22	16	0	0	0	0	0	16
11	375.20	M & R STRUCTURES - CITY GATE	22	0	0	0	0	0	0	0
12	375.31	M & R STRUCTURES - LOCAL GAS PURCH	22	0	0	0	0	0	0	0
13	375.40	M & R STRUCTURES - REGULATING	22	117,206	77,547	10,855	12,155	6,712	9,937	0
14	375.40	DIRECT - M & R STRUCTURES - REGULATING	22	586	0	0	0	0	0	586
15	375.60	M & R STRUCTURES - DIST. IND. M & R	17	806	0	32	149	333	292	0
16	375.70	M & R STRUCTURES - OTHER	11	253,915	183,344	21,687	22,210	10,893	15,649	132
17	375.71	M & R STRUCTURES - OTHER LEASED	11	501,481	362,104	42,832	43,865	21,514	30,906	261
18	375.80	M & R STRUCTURES - COMMUNICATION	22	326	216	30	34	19	28	0
19	376.00	MAINS	22	27,988,692	18,518,158	2,592,033	2,902,707	1,602,912	2,372,881	0
20	376.00	DIRECT - MAINS - MDS	22	4,197	0	0	0	0	0	4,197
21	376.08	MAINS-CSL REPLACEMENTS	22	0	0	0	0	0	0	0
22	376.30	MAINS-BARE STEEL	22	1,862,782	1,232,472	172,512	193,189	106,682	157,927	0
23	376.30	DIRECT - MAINS-BARE STEEL	22	3,188	0	0	0	0	0	3,188
24	376.80	MAINS-CAST IRON	22	14,024	9,279	1,299	1,454	803	1,189	0
25	378.10	M & R EQUIP - GENERAL	22	0	0	0	0	0	0	0
26	378.20	M & R EQUIP - GENERAL - REGULATING	22	1,507,886	997,663	139,645	156,383	86,357	127,839	0
27	378.20	DIRECT - M & R EQUIP-GEN-REG	22	7,916	0	0	0	0	0	7,916
28	378.30	M & R EQUIP - LOCAL GAS PURCHASES	22	0	0	0	0	0	0	0
29	379.10	M & R EQUIP - CITY GATE	22	4,193	2,774	388	435	240	356	0
30	379.11	M & R EQUIP - EXCHANGE GAS	22	0	0	0	0	0	0	0
31	380.00	SERVICES	15	13,906,289	12,627,884	1,024,337	215,408	28,786	9,874	0
32	380.00	DIRECT - SERVICES	15	1,028	0	0	0	0	0	1,028
33	380.12	CSL REPLACEMENT	15	0	0	0	0	0	0	0
34	381.00	METERS	16	913,408	680,443	36,783	184,225	9,216	2,594	146
35	381.10	AUTOMATIC METER READING	16	1,743,495	1,298,817	70,211	351,646	17,592	4,952	279
36	382.00	METER INSTALLATIONS	16	732,417	545,614	29,494	147,721	7,390	2,080	117
37	383.00	HOUSE REGULATORS	21	313,185	283,727	22,825	5,832	680	122	0
38	384.00	HOUSE REG INSTALLATIONS	21	64,393	58,336	4,693	1,199	140	25	0
39	385.00	IND M&R EQUIPMENT	17	213,714	0	8,566	39,370	88,289	77,488	0
40	385.00	DIRECT - IND M&R EQUIPMENT	17	13,396	0	0	0	0	0	13,396
41	385.10	IND M&R EQUIPMENT - LG VOLUME	17	0	0	0	0	0	0	0
42	387.10	OTHER EQUIP DISTRIBUTION	11	0	0	0	0	0	0	0
43	387.20	OTHER EQUIP ODORIZATION	11	0	0	0	0	0	0	0
44	387.42	OTHER EQUIP RADIO	11	0	0	0	0	0	0	0
45	387.44	OTHER EQUIP COMMUNICATION	11	0	0	0	0	0	0	0
46	387.46	OTHER EQUIP CUSTOMER INFO SERVICE	11	205,583	148,445	17,559	17,982	8,820	12,670	107
47	387.45	DIRECT - OTHER EQUIP CUSTOMER INFO SERVICE	11	1,800	0	0	0	0	0	1,800
48	387.50	GPS EQUIPMENT	11	490,955	354,504	41,933	42,944	21,062	30,258	255
49		TOTAL DISTRIBUTION PLANT		50,958,235	37,441,772	4,246,173	4,348,383	2,023,671	2,864,810	33,426
51	389-398	GENERAL PLANT	11	1,396,645	1,008,476	119,287	122,165	59,916	86,075	726
52		NET DEPRECIATION & AMORTIZATION EXPENSE		57,391,343	42,090,103	4,806,100	4,921,429	2,292,722	3,243,967	37,022
53		AMORTIZATION OF NET NEGATIVE SALVAGE	11	4,518,788	3,262,881	385,950	395,258	193,856	278,493	2,350
54		TOTAL AMORTIZATION AND DEPRECIATION EXPENSE		61,910,131	45,352,984	5,192,050	5,316,687	2,486,578	3,522,460	39,372



COLUMBIA GAS OF PENNSYLVANIA, INC.  
 OPERATING REVENUE @ PROPOSED & CURRENT RATES  
 FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017

ALLOCATED COST OF SERVICE  
 AVERAGE STUDY- ALLOCATORS 5 & 20

111, SCHEDULE 3  
 PAGE 6 OF 13  
 WITNESS: M. P. BALMERT

LINE NO.	ACCT NO. (A)	ACCOUNT TITLE (B)	ALLOC FACTOR (C)	TOTAL COMPANY (D)	RSS/RDS (E)	SGSS1/SCD1/SGDS1 (F)	SGSS2/SCD2/SGDS2 (G)	SDS/LGSS (H)	LDS/LGSS (I)	MLDS (J)
				\$	\$	\$	\$	\$	\$	\$
<u>PROPOSED OPERATING REVENUE</u>										
SALES REVENUE										
1	480/481	SALES BASE REVENUE		251,725,457	204,931,466	24,572,894	19,638,199	2,410,509	152,510	19,879
2		USP REVENUE		18,772,538	18,772,538	0	0	0	0	0
3		STAS REVENUE		0	0	0	0	0	0	0
4		RIDER CC - CUSTOMER CHOICE		33,400	24,298	4,337	4,765	0	0	0
5		GAS PROCUREMENT REVENUE		2,387,896	1,688,702	301,432	331,172	61,506	5,084	0
6		MERCHANT FUNCTION REVENUE		1,103,635	1,010,792	44,239	48,604	0	0	0
7		GAS COST REVENUE		116,090,077	84,638,917	13,442,546	14,768,860	2,742,911	226,707	272,136
8		TOTAL SALES REVENUE		390,113,003	311,064,713	38,365,448	34,791,600	5,214,926	384,301	292,015
TRANSPORTATION REVENUE										
9	489.00	TRANSPORTATION BASE REVENUE		135,924,181	78,979,581	8,698,910	16,749,071	16,156,593	15,256,731	83,295
10		USP REVENUE		5,836,220	5,836,220	0	0	0	0	0
11		STAS REVENUE		0	0	0	0	0	0	0
12		RIDER CC - CUSTOMER CHOICE		13,384	7,554	1,535	4,295	0	0	0
13		FLEX REVENUE		5,654,888	0	3,645	34,665	256,411	4,087,013	1,273,154
14		GAS COST REVENUE		8,044,182	5,558,233	1,035,992	1,449,957	0	0	0
15		TOTAL TRANSPORTATION REVENUE		155,472,855	90,381,588	9,740,082	18,237,988	16,413,004	19,343,744	1,356,449
MISCELLANEOUS REVENUE										
16	487.00	FORFEITED DISCOUNTS	10	1,327,956	970,297	118,693	133,420	53,556	47,528	4,462
17	488.00	MISCELLANEOUS REVENUE	6	145,854	132,981	10,591	2,064	184	32	3
18	493.00	RENTS	11	158,725	114,611	13,557	13,884	6,809	9,782	83
19	495.00	OTHER	6	248,647	226,701	18,054	3,518	313	55	5
20		TOTAL MISCELLANEOUS REVENUE		1,881,182	1,444,590	160,894	152,886	60,863	57,397	4,552
21		TOTAL PROPOSED OPERATING REVENUE		547,467,040	402,890,891	48,266,424	53,182,474	21,688,793	19,785,442	1,653,016
<u>CURRENT OPERATING REVENUE</u>										
SALES REVENUE										
22	480/481	SALES BASE REVENUE		215,343,199	174,174,360	21,428,464	17,418,550	2,170,964	130,982	19,879
23		USP REVENUE		16,522,555	16,522,555	0	0	0	0	0
24		STAS REVENUE		0	0	0	0	0	0	0
25		RIDER CC - CUSTOMER CHOICE		33,400	24,298	4,337	4,765	0	0	0
26		GAS PROCUREMENT REVENUE		2,387,896	1,688,702	301,432	331,172	61,506	5,084	0
27		MERCHANT FUNCTION REVENUE		1,103,635	1,010,792	44,239	48,604	0	0	0
28		GAS COST REVENUE		116,090,077	84,638,917	13,442,546	14,768,860	2,742,911	226,707	272,136
29		TOTAL SALES REVENUE		351,480,762	278,057,624	35,221,018	32,571,951	4,975,381	362,773	292,015
TRANSPORTATION REVENUE										
30	489.00	TRANSPORTATION BASE REVENUE		120,133,096	69,604,408	7,573,801	15,218,033	14,550,635	13,102,924	83,295
31		USP REVENUE		5,136,720	5,136,720	0	0	0	0	0
32		STAS REVENUE		0	0	0	0	0	0	0
33		RIDER CC - CUSTOMER CHOICE		13,384	7,554	1,535	4,295	0	0	0
34		FLEX REVENUE		5,654,888	0	3,645	34,665	256,411	4,087,013	1,273,154
35		GAS COST REVENUE		8,044,182	5,558,233	1,035,992	1,449,957	0	0	0
36		TOTAL TRANSPORTATION REVENUE		138,982,270	80,306,915	8,614,973	16,706,950	14,807,046	17,189,937	1,356,449
MISCELLANEOUS REVENUE										
37	487.00	FORFEITED DISCOUNTS	10	1,193,787	872,264	106,701	119,940	48,145	42,726	4,011
38	488.00	MISCELLANEOUS REVENUE	6	145,854	132,981	10,591	2,064	184	32	3
39	493.00	RENTS	11	158,725	114,611	13,557	13,884	6,809	9,782	83
40	495.00	OTHER	6	248,647	226,701	18,054	3,518	313	55	5
41		TOTAL MISCELLANEOUS REVENUE		1,747,013	1,346,557	148,902	139,406	55,452	52,595	4,102
42		TOTAL CURRENT OPERATING REVENUE		492,210,045	359,711,096	43,984,893	49,418,307	19,837,879	17,605,305	1,652,566

**COLUMBIA GAS OF PENNSYLVANIA, INC.  
PRODUCTION & DISTRIBUTION O&M EXPENSES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017**

ALLOCATED COST OF SERVICE  
AVERAGE STUDY- ALLOCATORS 5 & 20

111, SCHEDULE 3  
PAGE 7 OF 13  
WITNESS: M. P. BALMERT

LINE NO.	ACCT NO. (A)	ACCOUNT TITLE (B)	ALLOC FACTOR (C)	TOTAL COMPANY (D) \$	RSS/RDS (E) \$	SGSS1/SCD1/SGDS1 (F) \$	SGSS2/SCD2/SGDS2 (G) \$	SDS/LGSS (H) \$	LDS/LGSS (I) \$	MLDS (J) \$
<u>PURCHASED GAS EXPENSES</u>										
1		GAS PURCHASED COST		124,134,259	90,195,150	14,478,538	16,218,817	2,742,911	226,707	272,136
2	807.00	PURCHASED GAS EXPENSE	4	(1,284,339)	(933,175)	(149,805)	(167,812)	(28,384)	(2,350)	(2,813)
3	807.00	GAS PROCUREMENT EXPENSE	4	2,387,896	1,734,998	278,524	312,003	52,773	4,370	5,230
4		TOTAL PURCHASED GAS		<u>125,237,816</u>	<u>90,996,972</u>	<u>14,607,257</u>	<u>16,363,008</u>	<u>2,767,300</u>	<u>228,727</u>	<u>274,553</u>
<u>UNDERGROUND STORAGE OPERATIONS EXPENSES</u>										
5	816.00	WELLS	25	7,627	5,591	929	941	144	12	11
6	817.00	LINES	25	12,342	9,048	1,503	1,522	233	19	17
7	818.00	COMPRESSOR STATION	25	150,786	110,540	18,358	18,600	2,844	235	210
8	820.00	M & R	25	5,229	3,833	637	645	99	8	7
9	821.00	PURIFICATION	25	1,199	879	146	148	23	2	2
10	823.00	GAS LOSSES	25	2,053	1,505	250	253	39	3	3
11	825.00	STORAGE WELL ROYALTIES	25	10,586	7,761	1,289	1,306	200	17	15
12		TOTAL UNDERGROUND STORAGE OPERATIONS		<u>189,822</u>	<u>139,156</u>	<u>23,111</u>	<u>23,415</u>	<u>3,580</u>	<u>296</u>	<u>264</u>
<u>UNDERGROUND STORAGE MAINTENANCE EXPENSES</u>										
13	832.00	WELLS	25	2,871	2,105	350	354	54	5	4
14	834.00	COMPRESSOR STATION	25	3,275	2,401	399	404	62	5	5
15	836.00	PURIFICATION	25	6,551	4,802	798	808	124	10	9
16	840.00	OTHER STORAGE - OPERATION SUPERV - ENG	25	6	5	1	1	0	0	0
16		TOTAL UNDERGROUND STORAGE MAINTENANCE		<u>12,703</u>	<u>9,313</u>	<u>1,547</u>	<u>1,567</u>	<u>240</u>	<u>20</u>	<u>18</u>
17		TOTAL UNDERGROUND STORAGE		<u>202,525</u>	<u>148,469</u>	<u>24,657</u>	<u>24,982</u>	<u>3,820</u>	<u>316</u>	<u>282</u>
<u>DISTRIBUTION OPERATIONS EXPENSES</u>										
18	870.00	SUPERVISION & ENGINEERING	18	7,545,679	5,560,486	629,310	617,388	308,845	428,368	1,283
19	871.00	LOAD DISPATCHING	13	196,090	129,706	18,156	20,331	11,228	16,621	49
20	874.00	MAINS & SERVICES	14	16,897,282	12,230,760	1,483,581	1,374,932	731,652	1,072,977	3,380
21	875.00	M & R - GENERAL	13	467,159	309,007	43,254	48,435	26,750	39,596	117
22	876.00	M & R - INDUSTRIAL	17	295,774	0	11,855	54,488	122,190	107,242	0
23	878.00	METERS & HOUSE REGULATORS	23	2,644,529	2,028,592	118,369	466,786	23,801	6,611	370
24	879.00	CUSTOMER INSTALLATIONS	15	6,208,923	5,638,137	457,349	96,176	12,853	4,408	0
25	880.00	OTHER	18	6,561,473	4,835,215	547,227	536,860	268,561	372,495	1,116
26	881.00	RENTS	18	417,833	307,905	34,847	34,187	17,102	23,720	71
27		TOTAL DISTRIBUTION OPERATIONS		<u>41,234,742</u>	<u>31,039,808</u>	<u>3,343,948</u>	<u>3,249,581</u>	<u>1,522,981</u>	<u>2,072,039</u>	<u>6,385</u>
<u>DISTRIBUTION MAINTENANCE EXPENSES</u>										
28	885.00	SUPERVISION & ENGINEERING	18	70,565	52,000	5,885	5,774	2,888	4,006	12
29	886.00	STRUCTURES AND IMPROVEMENTS	13	167,094	110,526	15,471	17,324	9,568	14,163	42
30	887.00	MAINS	13	15,793,235	10,446,593	1,462,296	1,637,443	904,321	1,338,635	3,948
31	889.00	M & R - GENERAL	13	967,327	639,848	89,565	100,293	55,389	81,991	242
32	890.00	M & R - INDUSTRIAL	17	178,953	0	7,172	32,967	73,929	64,885	0
33	892.00	SERVICES	15	4,367,301	3,965,815	321,695	67,650	9,040	3,101	0
34	893.00	METERS & HOUSE REGULATORS	23	269,059	206,393	12,043	47,492	2,422	673	38
35	894.00	OTHER EQUIPMENT	18	1,088,055	801,799	90,744	89,025	44,534	61,769	185
36		TOTAL DISTRIBUTION MAINTENANCE		<u>22,901,589</u>	<u>16,222,974</u>	<u>2,004,871</u>	<u>1,997,966</u>	<u>1,102,091</u>	<u>1,569,221</u>	<u>4,467</u>
37		TOTAL DISTRIBUTION		<u>64,136,331</u>	<u>47,262,781</u>	<u>5,348,820</u>	<u>5,247,547</u>	<u>2,625,072</u>	<u>3,641,260</u>	<u>10,851</u>

COLUMBIA GAS OF PENNSYLVANIA, INC.  
OTHER O&M EXPENSES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017

ALLOCATED COST OF SERVICE  
AVERAGE STUDY- ALLOCATORS 5 & 20

111, SCHEDULE 3  
PAGE 8 OF 13  
WITNESS: M. P. BALMERT

LINE NO.	ACCT NO.	ACCOUNT TITLE	ALLOC FACTOR	TOTAL COMPANY	RSS/RDS	SGSS1/SCD1/SGDS1	SGSS2/SCD2/SGDS2	SDS/LGSS	LDS/LGSS	MLDS
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
				\$	\$	\$	\$	\$	\$	\$
<u>CUSTOMER ACCOUNTS EXPENSES</u>										
1	901.00	SUPERVISION	6	0	0	0	0	0	0	0
2	902.00	METER READING	6	863,552	787,335	62,703	12,219	1,088	190	17
3	903.00	CUSTOMER RECORDS AND COLLECTION EXPENS	6	10,353,303	9,439,521	751,753	146,499	13,045	2,278	207
4	903.00	INTEREST ON CUSTOMER DEPOSITS	9	97,862	70,740	24,796	2,326	0	0	0
5	903.00	RESIDENTIAL CUSTOMER PAYMENT OPTIONS		516,954	516,954	0	0	0	0	0
6	904.00	UNCOLLECTIBLES-DIS REVENUE	7	3,984,711	3,725,585	127,830	131,296	0	0	0
7	904.00	UNCOLLECTIBLES-GMB/GTS REVENUE	8	340,436	0	575	16,212	155,212	153,884	14,554
8	904.00	UNCOLLECTIBLES-UNBUNDLED GAS	Direct	1,103,635	1,010,792	44,239	48,604	0	0	0
9	904.00	DIRECT USP UNCOLLECTIBLES		10,878,013	10,878,013	0	0	0	0	0
10	905.00	MISCELLANEOUS	6	19,056	17,374	1,384	270	24	4	0
11	921.00	OFFICE SUPPLIES & EXPENSES	6	0	0	0	0	0	0	0
12		TOTAL CUSTOMER ACCOUNTS		<u>28,157,522</u>	<u>26,446,313</u>	<u>1,013,280</u>	<u>357,426</u>	<u>169,369</u>	<u>156,356</u>	<u>14,778</u>
<u>CUST SERVICE &amp; INFORMATION EXPENSES</u>										
13	907.00	SUPERVISION	6	250	228	18	4	0	0	0
14	908.00	CUSTOMER ASSISTANCE	6	696,933	635,436	50,604	9,862	878	153	0
15	908.00	DIRECT USP/LIURP/HEEP		10,781,262	10,781,262	0	0	0	0	0
16	909.00	INFORMATIONAL & INSTRUCTIONAL EXPENSES	6	233,383	212,785	16,946	3,302	294	51	5
17	910.00	MISCELLANEOUS	6	927,678	845,801	67,359	13,127	1,169	204	19
18	921.00	OFFICE SUPPLIES & EXPENSES	6	0	0	0	0	0	0	0
19	931.00	RENTS - GENERAL	6	0	0	0	0	0	0	0
20	932.00	MAINTENANCE	6	0	0	0	0	0	0	0
21		TOTAL CUST SERVICE & INFORMATION		<u>12,639,506</u>	<u>12,475,511</u>	<u>134,927</u>	<u>26,294</u>	<u>2,341</u>	<u>409</u>	<u>23</u>
<u>SALES EXPENSES</u>										
22	912.00	DEMONSTRATION	6	669,089	610,035	48,583	9,468	843	147	13
23	913.00	ADVERTISING	6	29,481	26,879	2,141	417	37	7	1
24		TOTAL SALES		<u>698,570</u>	<u>636,914</u>	<u>50,723</u>	<u>9,885</u>	<u>880</u>	<u>154</u>	<u>14</u>
<u>ADMINISTRATIVE AND GENERAL EXPENSES</u>										
25	920.00	SALARIES	19	13,351,627	10,262,595	1,091,629	938,753	446,612	609,769	2,270
26	921.00	OFFICE SUPPLIES & EXPENSES	19	2,852,186	2,192,304	233,195	200,537	95,406	130,259	485
27	922.00	ADMIN. EXPENSE TRANSFERRED	19	0	0	0	0	0	0	0
28	923.00	OUTSIDE SERVICES EMPLOYED	19	35,420,414	27,225,547	2,895,973	2,490,409	1,184,813	1,617,650	6,022
29	923.00	MULTIFAMILY HOUSE LINE REIMBURSEMENT		357,403	357,403	0	0	0	0	0
30	924.00	PROPERTY INSURANCE	19	192,093	147,650	15,706	13,506	6,426	8,773	33
31	925.00	INJURIES AND DAMAGES	19	4,020,041	3,089,964	328,679	282,649	134,470	183,595	683
32	926.00	EMPLOYEE PENSIONS & BENEFITS	24	10,876,178	8,263,285	878,686	820,716	387,518	524,341	1,631
33	928.00	REGULATORY COMMISSION EXPENSES	19	2,460,000	1,890,854	201,130	172,963	82,287	112,348	418
34	930.00	MISCELLANEOUS GENERAL	19	837,506	643,741	68,475	58,885	28,015	38,249	142
35	931.00	RENTS-GENERAL	19	4,214,959	3,239,786	344,615	296,354	140,990	192,497	717
36	932.00	MAINTENANCE	19	1,253,619	963,582	102,496	88,142	41,934	57,253	213
37		TOTAL ADMINISTRATIVE & GENERAL		<u>75,836,026</u>	<u>58,276,711</u>	<u>6,160,582</u>	<u>5,362,914</u>	<u>2,548,470</u>	<u>3,474,734</u>	<u>12,614</u>
38		TOTAL O & M EXPENSES		<u>306,908,296</u>	<u>236,243,672</u>	<u>27,340,246</u>	<u>27,392,055</u>	<u>8,117,251</u>	<u>7,501,955</u>	<u>313,116</u>

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**TAXES OTHER THAN INCOME TAXES**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017**

**ALLOCATED COST OF SERVICE**  
**AVERAGE STUDY- ALLOCATORS 5 & 20**

111, SCHEDULE 3  
 PAGE 9 OF 13  
 WITNESS: M. P. BALMERT

LINE NO.	ACCT NO. (A)	ACCOUNT TITLE (B)	ALLOC FACTOR (C)	TOTAL COMPANY (D)	RSS/RDS (E)	SGSS1/SCD1/SGDS1 (F)	SGSS2/SCD2/SGDS2 (G)	SDS/LGSS (H)	LDS/LGSS (I)	MLDS (J)
				\$	\$	\$	\$	\$	\$	\$
		<u>FEDERAL TAXES</u>								
1	408.00	FEDERAL/STATE UNEMPLOYMENT	24	164,608	125,063	13,299	12,421	5,865	7,936	25
2	408.00	FICA	24	<u>2,446,225</u>	<u>1,858,544</u>	<u>197,631</u>	<u>184,592</u>	<u>87,159</u>	<u>117,933</u>	<u>367</u>
3		TOTAL FEDERAL TAXES		<u>2,610,833</u>	<u>1,983,607</u>	<u>210,929</u>	<u>197,014</u>	<u>93,024</u>	<u>125,868</u>	<u>392</u>
		<u>STATE TAXES</u>								
4	408.00	PA PROPERTY TAXES	11	463,359	334,578	39,576	40,530	19,878	28,557	241
5	408.00	PA STATE UNEMPLOYMENT	24	0	0	0	0	0	0	0
6	408.00	STATE CAPITAL STOCK TAX	11	0	0	0	0	0	0	0
7	408.00	LICENSE AND FRANCHISE TAX	11	7,343	5,302	627	642	315	453	4
8	408.00	STATE SALES AND USE TAX	19	0	0	0	0	0	0	0
9	408.00	OTHER	19	<u>8,749</u>	<u>6,725</u>	<u>715</u>	<u>615</u>	<u>293</u>	<u>400</u>	<u>2</u>
10		TOTAL STATE TAXES		<u>479,451</u>	<u>346,605</u>	<u>40,918</u>	<u>41,787</u>	<u>20,486</u>	<u>29,409</u>	<u>246</u>
11		TOTAL TAXES OTHER THAN INCOME		<u>3,090,284</u>	<u>2,330,211</u>	<u>251,847</u>	<u>238,801</u>	<u>113,510</u>	<u>155,277</u>	<u>638</u>

COLUMBIA GAS OF PENNSYLVANIA, INC.  
 RATE BASE  
 FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017

ALLOCATED COST OF SERVICE  
 AVERAGE STUDY- ALLOCATORS 5 & 20

111, SCHEDULE 3  
 PAGE 10 OF 13  
 WITNESS: M. P. BALMERT

LINE NO.	ACCT NO. (A)	ACCOUNT TITLE (B)	ALLOC FACTOR (C)	TOTAL COMPANY (D) \$	RSS/RDS (E) \$	SGSS1/SCD1/SGDS1 (F) \$	SGSS2/SCD2/SGDS2 (G) \$	SDS/LGSS (H) \$	LDS/LGSS (I) \$	MLDS (J) \$
1	101-107	GROSS PLANT [PAGE 3]		2,211,566,200	1,596,916,523	189,108,356	193,649,635	94,730,350	135,948,454	1,212,883
2	117.00	GAS STORED UNDERGROUND - NON CURRENT	25	3,794,693	2,781,851	462,004	468,075	71,568	5,920	5,275
3	108-111	DEPRECIATION RESERVE [PAGE 4]		(421,089,299)	(313,179,742)	(34,117,512)	(35,971,860)	(15,802,750)	(21,706,380)	(311,056)
4	117.00	GAS LOST-UNDERGROUND STORAGE	25	<u>(163,467)</u>	<u>(119,836)</u>	<u>(19,902)</u>	<u>(20,164)</u>	<u>(3,083)</u>	<u>(255)</u>	<u>(227)</u>
5		NET PLANT		1,794,108,127	1,286,398,796	155,432,946	158,125,687	78,996,085	114,247,739	906,875
<u>WORKING CAPITAL</u>										
6	154.00	MATERIALS & SUPPLIES	11	738,718	533,406	63,094	64,616	31,691	45,527	384
7	164.00	GAS STORED UNDERGROUND - FSS	25	48,336,766	35,435,201	5,885,001	5,962,340	911,631	75,405	67,188
8	165.00	PREPAYMENTS	19	2,175,574	1,672,233	177,875	152,965	72,773	99,358	370
9		CASH WORKING CAPITAL - GAS PURCHASES	4	0	0	0	0	0	0	0
10		CASH WORKING CAPITAL - ALL OTHER	19	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
11		TOTAL WORKING CAPITAL		51,251,058	37,640,840	6,125,970	6,179,921	1,016,095	220,290	67,942
<u>DEFERRED INCOME TAXES</u>										
12	190.00	ACCUMULATED DEF INCOME TAX	12	41,598,839	30,037,690	3,557,117	3,642,394	1,781,678	2,557,081	22,879
13	282.00	ACCUMULATED DEF INCOME TAX	12	(389,606,268)	(281,326,894)	(33,315,232)	(34,113,925)	(16,686,837)	(23,949,097)	(214,283)
14	283.00	ACCUMULATED DEF INCOME TAX	12	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
15		TOTAL DEFERRED INCOME TAXES		(348,007,429)	(251,289,204)	(29,758,115)	(30,471,531)	(14,905,158)	(21,392,017)	(191,404)
16	235.00	CUSTOMER DEPOSITS	9	(3,164,548)	(2,287,494)	(801,833)	(75,221)	0	0	0
17	252.00	CUSTOMER ADVANCES	22	<u>(96,133)</u>	<u>(63,604)</u>	<u>(8,903)</u>	<u>(9,970)</u>	<u>(5,506)</u>	<u>(8,150)</u>	<u>0</u>
18		RATE BASE		<u>1,494,091,075</u>	<u>1,070,399,334</u>	<u>130,990,065</u>	<u>133,748,886</u>	<u>65,101,516</u>	<u>93,067,862</u>	<u>783,413</u>

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**STATE/FEDERAL INCOME TAXES**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017**

ALLOCATED COST OF SERVICE  
AVERAGE STUDY- ALLOCATORS 5 & 20

111, SCHEDULE 3  
PAGE 11 OF 13  
WITNESS: M. P. BALMERT

LINE NO.	ACCT NO. (A)	ALLOC FACTOR (B)	TOTAL COMPANY (C) \$	RSS/RDS (D) \$	SGSS1/SCD1/SGDS1 (E) \$	SGSS2/SCD2/SGDS2 (F) \$	SDS/LGSS (G) \$	LDS/LGSS (H) \$	MLDS (I) \$
<b>STATE INCOME TAX</b>									
1	OPERATING INCOME BEFORE TAXES (PG. 2, LINE 8)		120,301,333	75,784,228	11,200,750	16,470,763	9,120,540	6,425,612	1,299,440
2	STATUTORY ADJUSTMENTS	12	(153,871,920)	(111,107,836)	(13,157,588)	(13,473,025)	(6,590,334)	(9,458,507)	(84,630)
3	INTEREST ON DEBT		(35,858,186)	(25,689,584)	(3,143,762)	(3,209,973)	(1,562,436)	(2,233,629)	(18,802)
4	PA BONUS DEPRECIATION ADJUSTMENT	12	<u>76,385,438</u>	<u>55,156,397</u>	<u>6,531,719</u>	<u>6,688,309</u>	<u>3,271,588</u>	<u>4,695,413</u>	<u>42,012</u>
5	STATE TAXABLE INCOME		6,956,665	(5,856,795)	1,431,119	6,476,073	4,239,357	(571,111)	1,238,021
6	NET OPERATING LOSS DEDUCTION	12	(5,000,000)	(3,610,400)	(427,550)	(437,800)	(214,150)	(307,350)	(2,750)
	STATE TAXABLE INCOME		1,956,665	(9,467,195)	1,003,569	6,038,273	4,025,207	(878,461)	1,235,271
7	STATE NET INCOME TAX @ 9.99%		195,471	(945,773)	100,257	603,224	402,118	(87,758)	123,404
8	DEFERRED INCOME TAXES	12	(94,628)	(68,329)	(8,092)	(8,286)	(4,053)	(5,817)	(52)
9	STATE INCOME TAX		100,843	(1,014,102)	92,165	594,938	398,065	(93,575)	123,352
<b>FEDERAL INCOME TAX</b>									
10	OPERATING INCOME BEFORE TAXES (PG. 2, LINE 8)		120,301,333	75,784,228	11,200,750	16,470,763	9,120,540	6,425,612	1,299,440
11	STATE NET INCOME TAX (LINE 7)		(195,471)	945,773	(100,257)	(603,224)	(402,118)	87,758	(123,404)
12	STATUTORY ADJUSTMENTS (LINES 2 & 3)	12	(189,730,106)	(136,797,420)	(16,301,349)	(16,682,999)	(8,152,771)	(11,692,136)	(103,432)
13	FEDERAL TAXABLE INCOME		(69,624,244)	(60,067,419)	(5,200,856)	(815,459)	565,651	(5,178,766)	1,072,605
14	FEDERAL INCOME TAX @ 35%		(24,368,485)	(21,023,597)	(1,820,300)	(285,411)	197,978	(1,812,568)	375,412
15	DEFERRED INCOME TAXES	12	56,006,594	40,441,241	4,789,124	4,903,937	2,398,762	3,442,725	30,804
16	TAX REFUND AMORTIZATION	12	0	0	0	0	0	0	0
17	FLOW BACK OF EXCESS DEFERRED TAXES	12	(89,482)	(64,613)	(7,652)	(7,835)	(3,833)	(5,501)	(49)
18	EFFECT OF CNIT DEFERRED TAX ON FIT	12	<u>33,120</u>	<u>23,915</u>	<u>2,832</u>	<u>2,900</u>	<u>1,419</u>	<u>2,036</u>	<u>18</u>
19	FEDERAL INCOME TAX		31,581,746	19,376,947	2,964,005	4,613,592	2,594,326	1,626,693	406,184
20	STATE NET INCOME TAX (LINE 9)		<u>100,843</u>	<u>(1,014,102)</u>	<u>92,165</u>	<u>594,938</u>	<u>398,065</u>	<u>(93,575)</u>	<u>123,352</u>
21	TOTAL INCOME TAXES		<u>31,682,589</u>	<u>18,362,845</u>	<u>3,056,170</u>	<u>5,208,530</u>	<u>2,992,392</u>	<u>1,533,118</u>	<u>529,536</u>

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**ALLOCATION FACTORS**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017**

111, SCHEDULE 3  
PAGE 12 OF 13  
WITNESS: M. P. BALMERT

**ALLOCATED COST OF SERVICE**  
**AVERAGE STUDY- ALLOCATORS 5 & 20**

<u>LINE NO.</u>	<u>DESCRIPTION</u> (A)	<u>ALLOC FACTOR</u> (B)	<u>TOTAL COMPANY</u> (C)	<u>RSS/RDS</u> (D)	<u>SGSS1/SCD1/SGDS1</u> (E)	<u>SGSS2/SCD2/SGDS2</u> (F)	<u>SDS/LGSS</u> (G)	<u>LDS/LGSS</u> (H)	<u>MLDS</u> (I)
1	DESIGN DAY	1	769,993,000	441,900,000	82,752,000	109,891,000	63,707,000	71,743,000	0
2	PERCENT		100.000%	57.390%	10.747%	14.272%	8.274%	9.317%	0.000%
3	THROUGHPUT EXCLUDING TRANSPORTATION	2	36,975,011	26,849,669	4,337,145	4,765,071	884,981	73,145	65,000
4	PERCENT		100.000%	72.616%	11.730%	12.887%	2.393%	0.198%	0.176%
5	THROUGHPUT EXCLUDING MDS	3	77,638,044	34,403,669	5,872,345	9,081,554	7,225,995	21,054,482	0
6	PERCENT		100.000%	44.313%	7.564%	11.697%	9.307%	27.119%	0.000%
7	GAS PURCHASED EXPENSE	4	124,134,259	90,195,150	14,478,538	16,218,817	2,742,911	226,707	272,136
8	PERCENT		100.000%	72.658%	11.664%	13.066%	2.210%	0.183%	0.219%
9	PEAK & AVERAGE MAINS	5							
10	PERCENT		100.000%	56.937%	9.542%	13.092%	7.435%	12.994%	0.000%
11	AVERAGE NO. OF CUSTOMERS	6	426,388	388,751	30,960	6,035	537	95	10
12	PERCENT		100.000%	91.174%	7.261%	1.415%	0.126%	0.022%	0.002%
13	DISTRIBUTION UNCOLLECTIBLES	7	11,699,639	10,938,832	375,282	385,525	0	0	0
14	PERCENT		100.000%	93.497%	3.208%	3.295%	0.000%	0.000%	0.000%
15	CURRENT GMB/GTS REVENUE	8	38,556,457	0	64,979	1,836,049	17,578,831	17,428,134	1,648,464
16	PERCENT		100.000%	0.000%	0.169%	4.762%	45.592%	45.202%	4.275%
17	CUSTOMER DEPOSITS	9	2,632,633	1,903,023	667,045	62,565	0	0	0
18	PERCENT		100.000%	72.285%	25.338%	2.377%	0.000%	0.000%	0.000%
19	FORFEITED DISCOUNTS	10	1,192,278	871,157	106,562	119,793	48,090	42,669	4,007
20	PERCENT		100.000%	73.067%	8.938%	10.047%	4.033%	3.579%	0.336%
21	DIST. PLANT EXCL ACCTS 375.70, 375.71, & 387	11	2,120,695,852	1,531,277,443	181,138,155	185,495,062	90,975,822	130,704,906	1,104,464
22	PERCENT		100.000%	72.207%	8.541%	8.747%	4.290%	6.163%	0.052%
23	GROSS PLANT	12	2,211,566,200	1,596,916,523	189,108,356	193,649,635	94,730,350	135,948,454	1,212,883
24	PERCENT		100.000%	72.208%	8.551%	8.756%	4.283%	6.147%	0.055%
25	MAINS - ACCOUNT 376	13	1,448,157,780	957,908,826	134,080,886	150,151,481	82,915,585	122,744,601	356,401
26	PERCENT		100.000%	66.146%	9.259%	10.368%	5.726%	8.476%	0.025%

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**ALLOCATION FACTORS (CONT.)**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017**

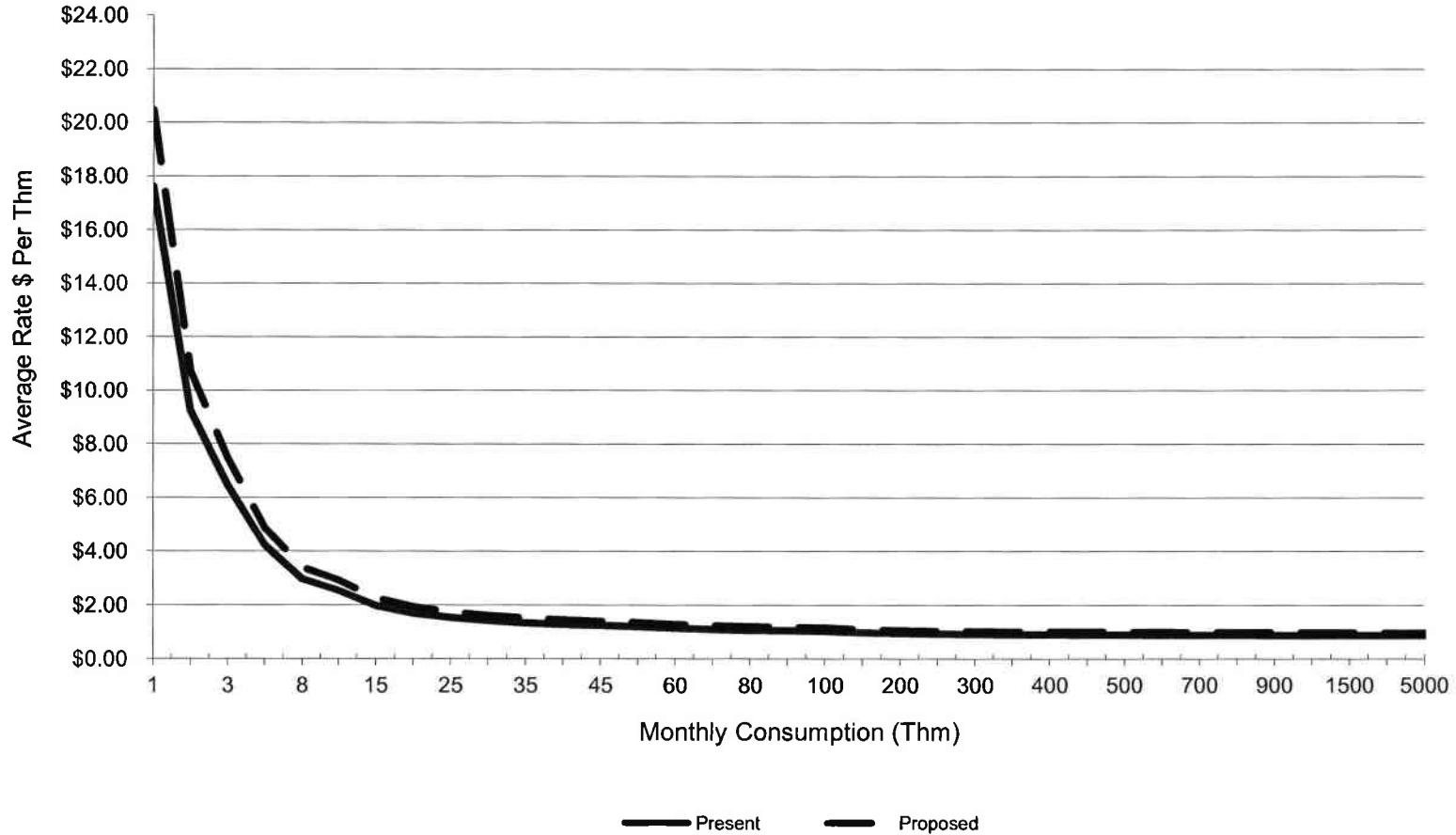
**ALLOCATED COST OF SERVICE**  
**AVERAGE STUDY- ALLOCATORS 5 & 20**

**111, SCHEDULE 3**  
**PAGE 13 OF 13**  
**WITNESS: M. P. BALMERT**

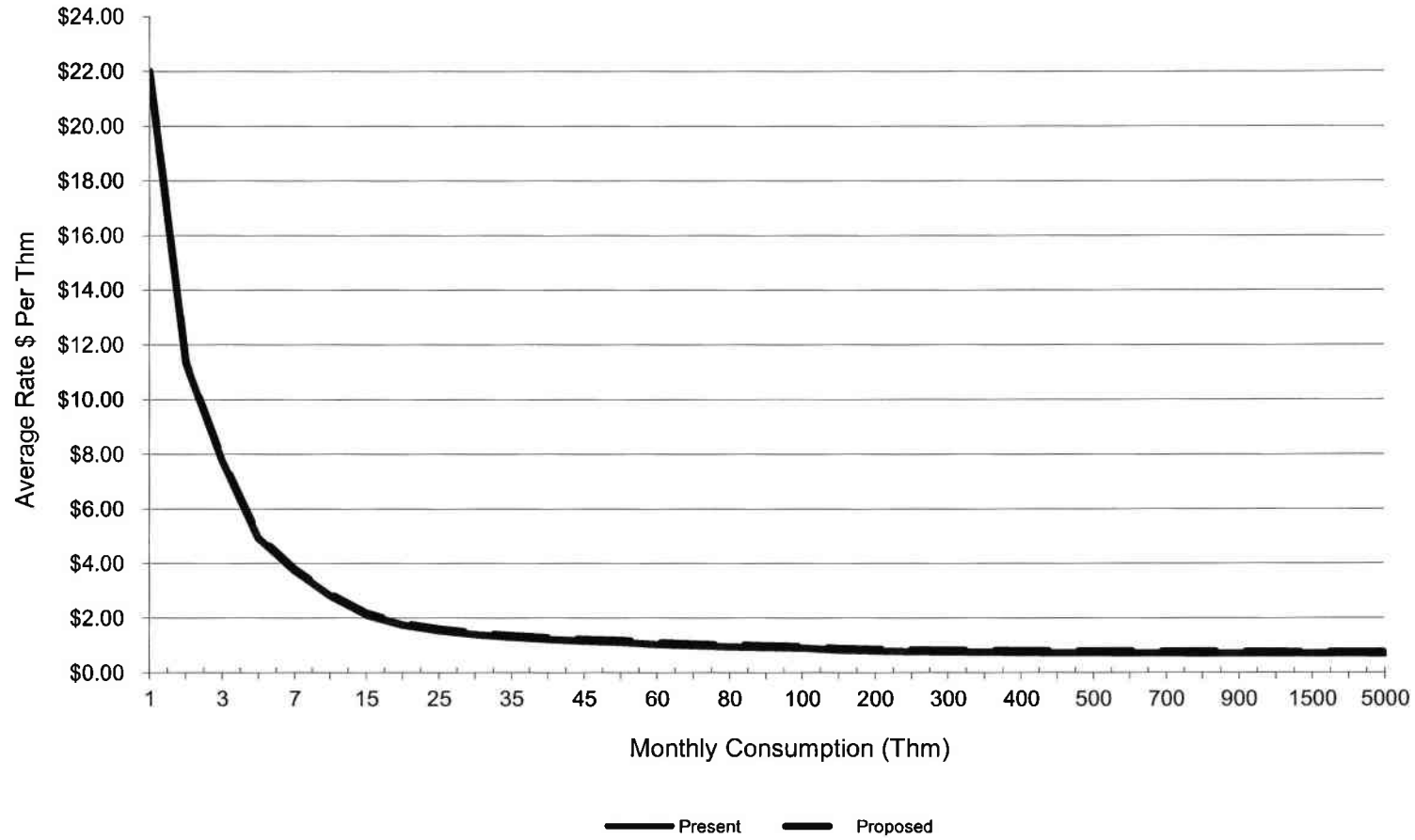
<u>LINE NO.</u>	<u>DESCRIPTION (A)</u>	<u>ALLOC FACTOR (B)</u>	<u>TOTAL COMPANY (C)</u>	<u>RSS/RDS (D)</u>	<u>SGSS1/SCD1/SGDS1 (E)</u>	<u>SGSS2/SCD2/SGDS2 (F)</u>	<u>SDS/LGSS (G)</u>	<u>LDS/LGSS (H)</u>	<u>MLDS (I)</u>
27	COMPOSITE DIRECT PLANT - ACCTS 376 & 380	14	1,938,540,112	1,403,174,529	170,199,546	157,746,893	83,930,595	123,092,745	395,804
28	PERCENT		100.000%	72.383%	8.780%	8.137%	4.330%	6.350%	0.020%
29	SERVICES	15	357,295,382	324,449,571	26,316,820	5,535,815	741,276	251,900	0
30	PERCENT		100.000%	90.807%	7.366%	1.549%	0.207%	0.071%	0.000%
31	METERS	16	26,466,882	19,716,446	1,065,916	5,338,167	267,092	75,039	4,221
32	PERCENT		100.000%	74.495%	4.027%	20.169%	1.009%	0.284%	0.016%
33	INDUSTRIAL M & R	17	5,159,754	0	206,786	950,547	2,131,616	1,870,805	0
34	PERCENT		100.000%	0.000%	4.008%	18.422%	41.312%	36.258%	0.000%
35	OTHER DISTRIBUTION O & M EXPENSES	18	48,452,726	35,705,376	4,040,807	3,964,314	1,983,142	2,750,902	8,185
36	PERCENT		100.000%	73.691%	8.340%	8.182%	4.093%	5.677%	0.017%
37	O & M EXCL GAS PUR, UNCOLLECTIBLES, & A & G	19	79,849,954	61,376,159	6,528,482	5,614,212	2,670,659	3,646,630	13,812
38	PERCENT		100.000%	76.864%	8.176%	7.031%	3.345%	4.567%	0.017%
39	CUSTOMER/DEMAND MAINS	20							
40	PERCENT		100.000%	75.390%	8.980%	7.650%	4.019%	3.961%	0.000%
41	HOUSE REGULATORS (GPA 383)	21	2,865,715	2,596,164	208,844	53,359	6,232	1,116	0
42	PERCENT		100.00%	90.594%	7.288%	1.862%	0.217%	0.039%	0.000%
43	AVERAGE - ALLOCATORS 5 & 20	22							
44	PERCENT		100.00%	66.163%	9.261%	10.371%	5.727%	8.478%	0.000%
45	METERS AND HOUSE REGULATORS	23	115,692,095	88,746,523	5,177,816	20,420,902	1,041,309	289,581	15,965
46	PERCENT		100.000%	76.709%	4.476%	17.651%	0.900%	0.250%	0.014%
47	LABOR	24	27,414,523	20,828,892	2,214,732	2,068,622	976,661	1,321,553	4,063
48	PERCENT		100.000%	75.976%	8.079%	7.546%	3.563%	4.821%	0.015%
49	SALES AND CHOICE TRANSPORTATION	25	46,929,035	34,403,669	5,713,732	5,788,507	884,981	73,145	65,000
50	PERCENT		100.000%	73.309%	12.175%	12.335%	1.886%	0.156%	0.139%



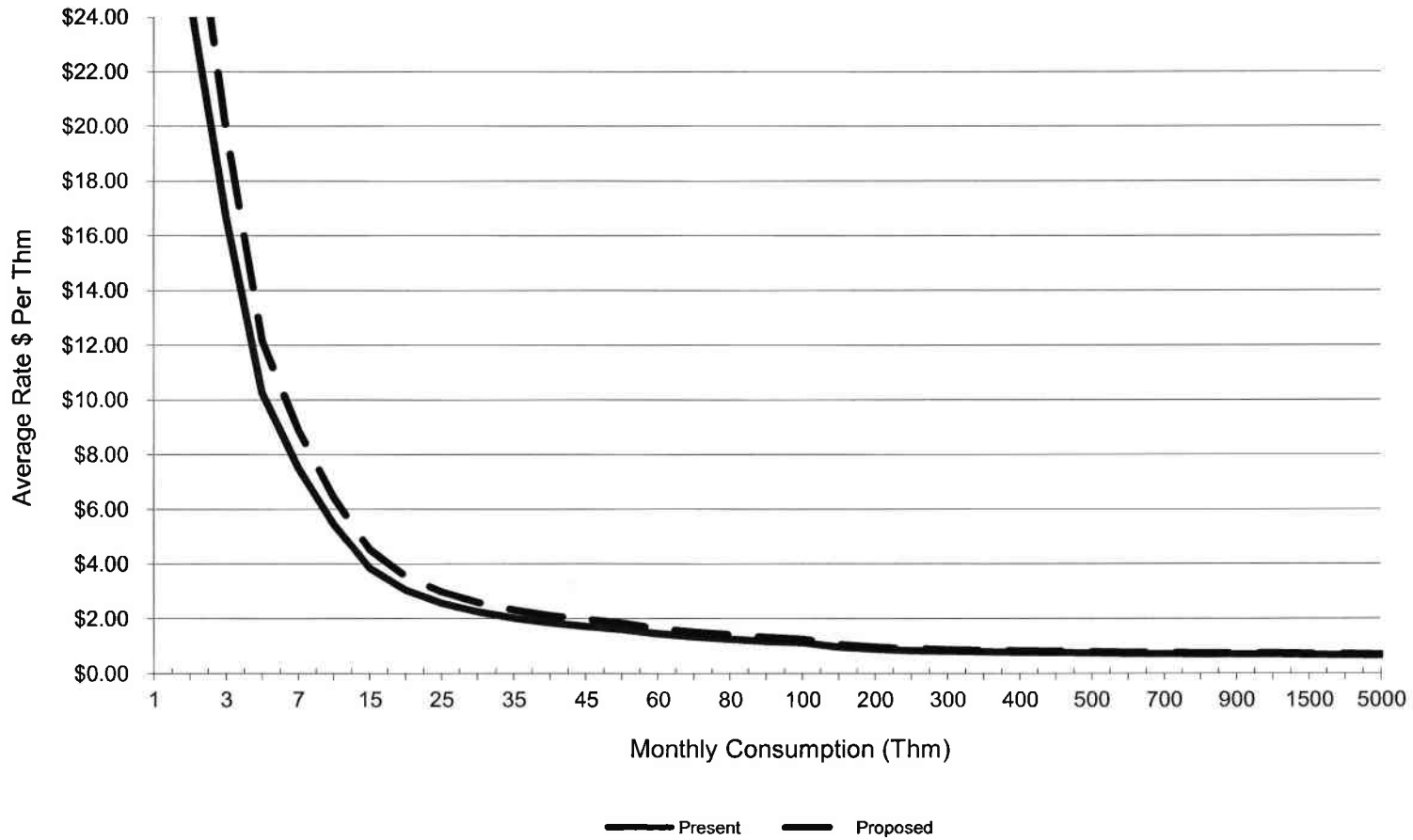
COLUMBIA GAS OF PENNSYLVANIA, INC  
PRESENT AND PROPOSED RATES  
Residential Sales Service



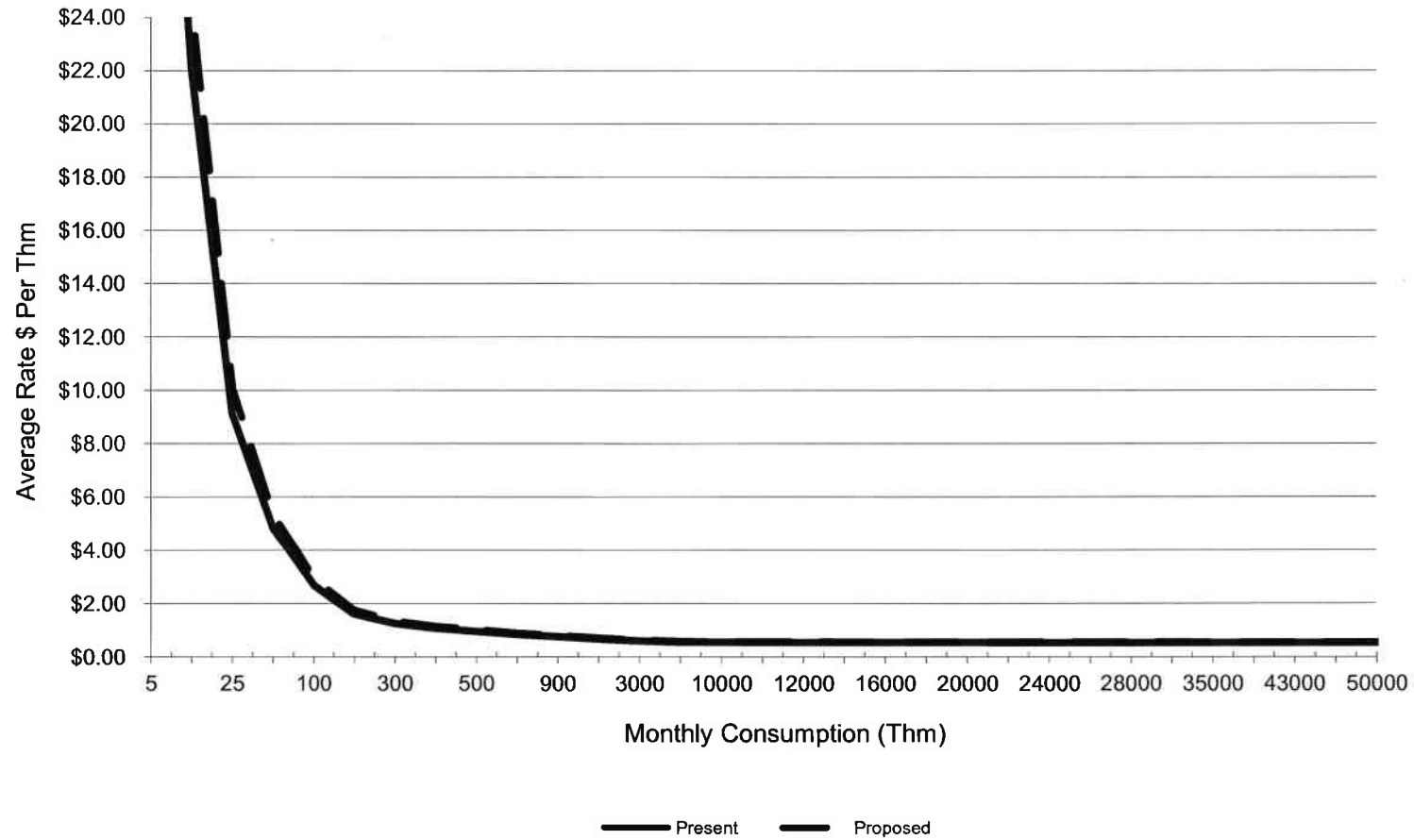
COLUMBIA GAS OF PENNSYLVANIA, INC  
PRESENT AND PROPOSED RATES  
Small General Sales Service ( $\leq 6,440$  Thms Annually)



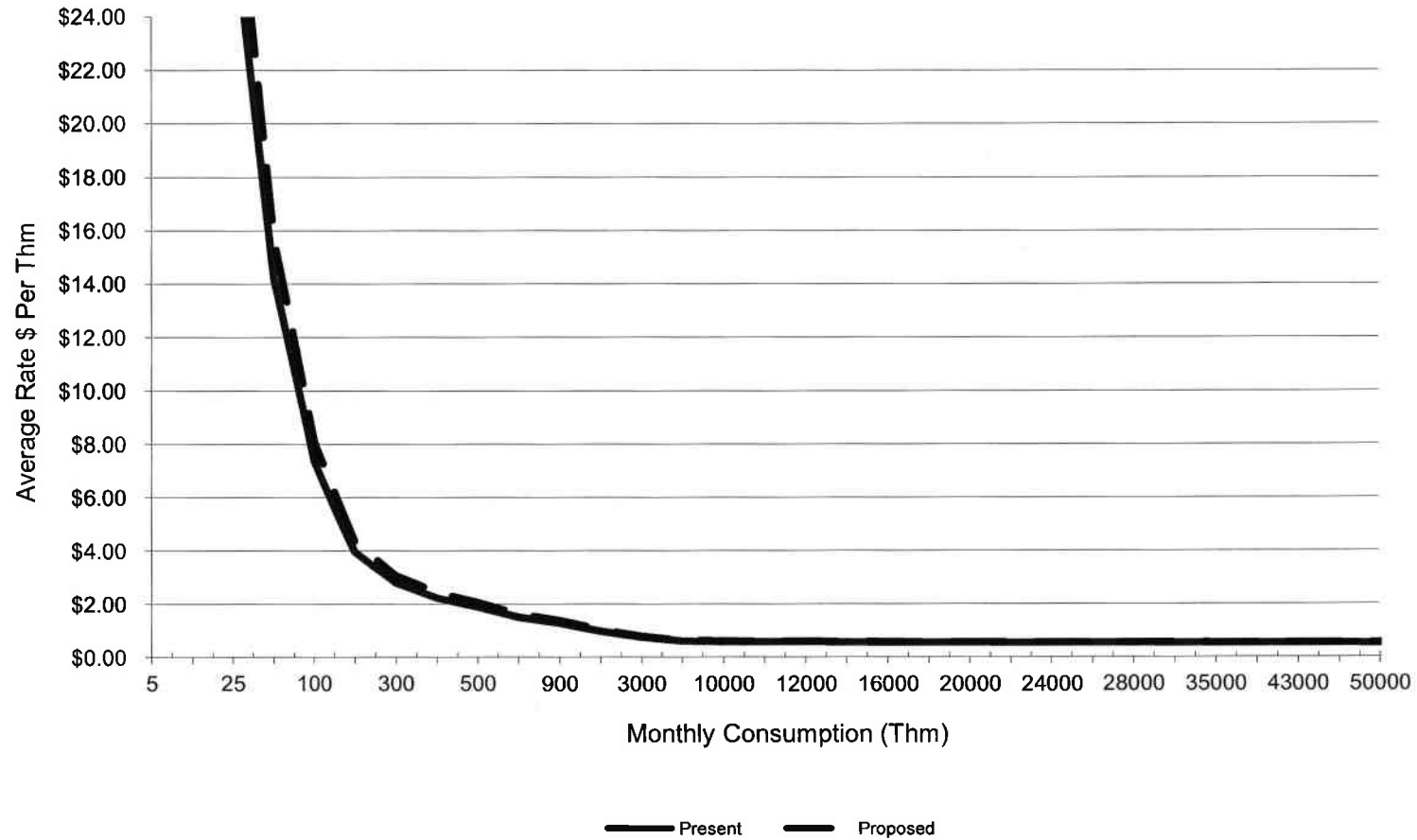
COLUMBIA GAS OF PENNSYLVANIA, INC  
PRESENT AND PROPOSED RATES  
Small General Sales Service (>6,440 and ≤64,400 Thms Annually)



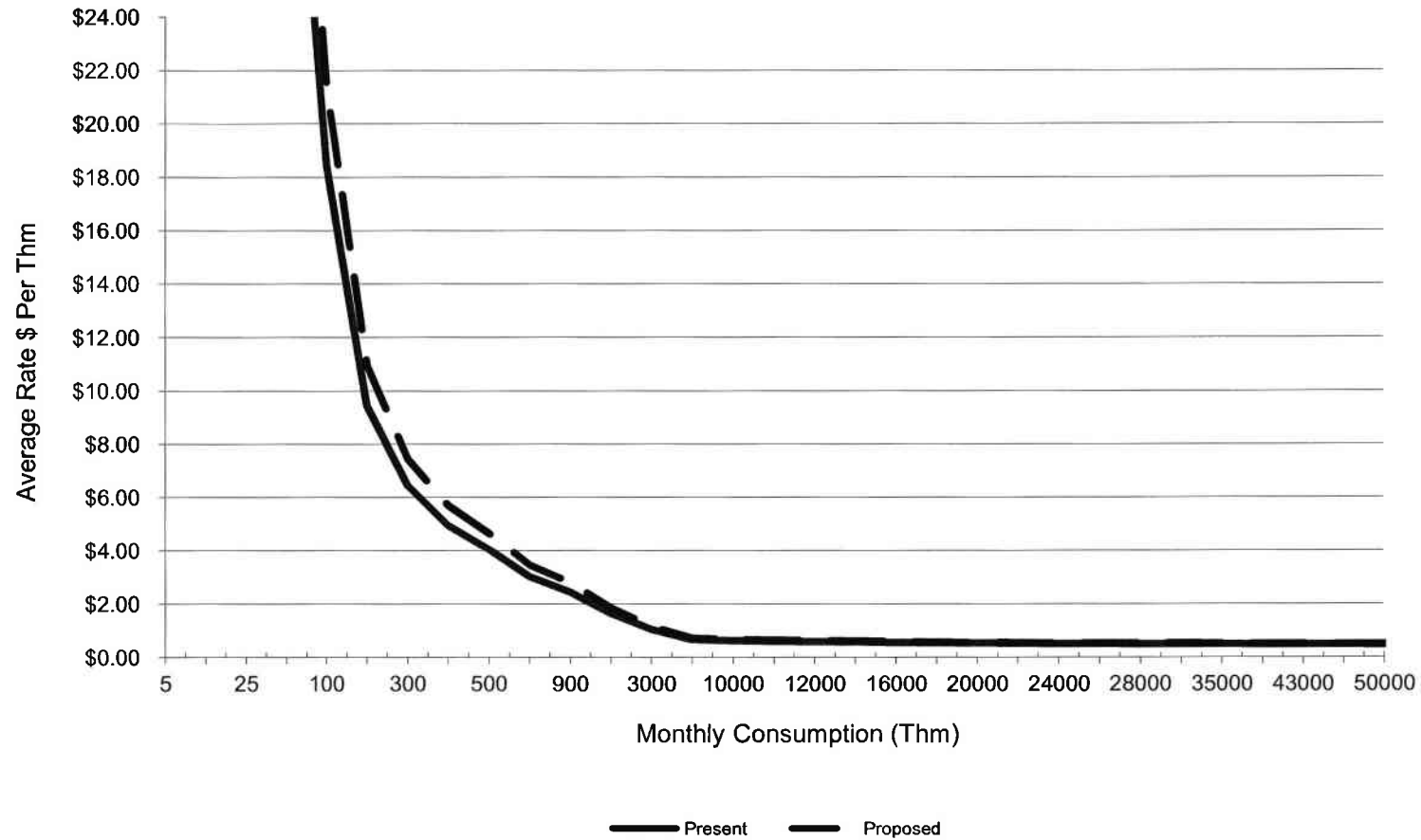
COLUMBIA GAS OF PENNSYLVANIA, INC  
PRESENT AND PROPOSED RATES  
Large General Sales Service ( $\leq 110,000$  Thms Annually)



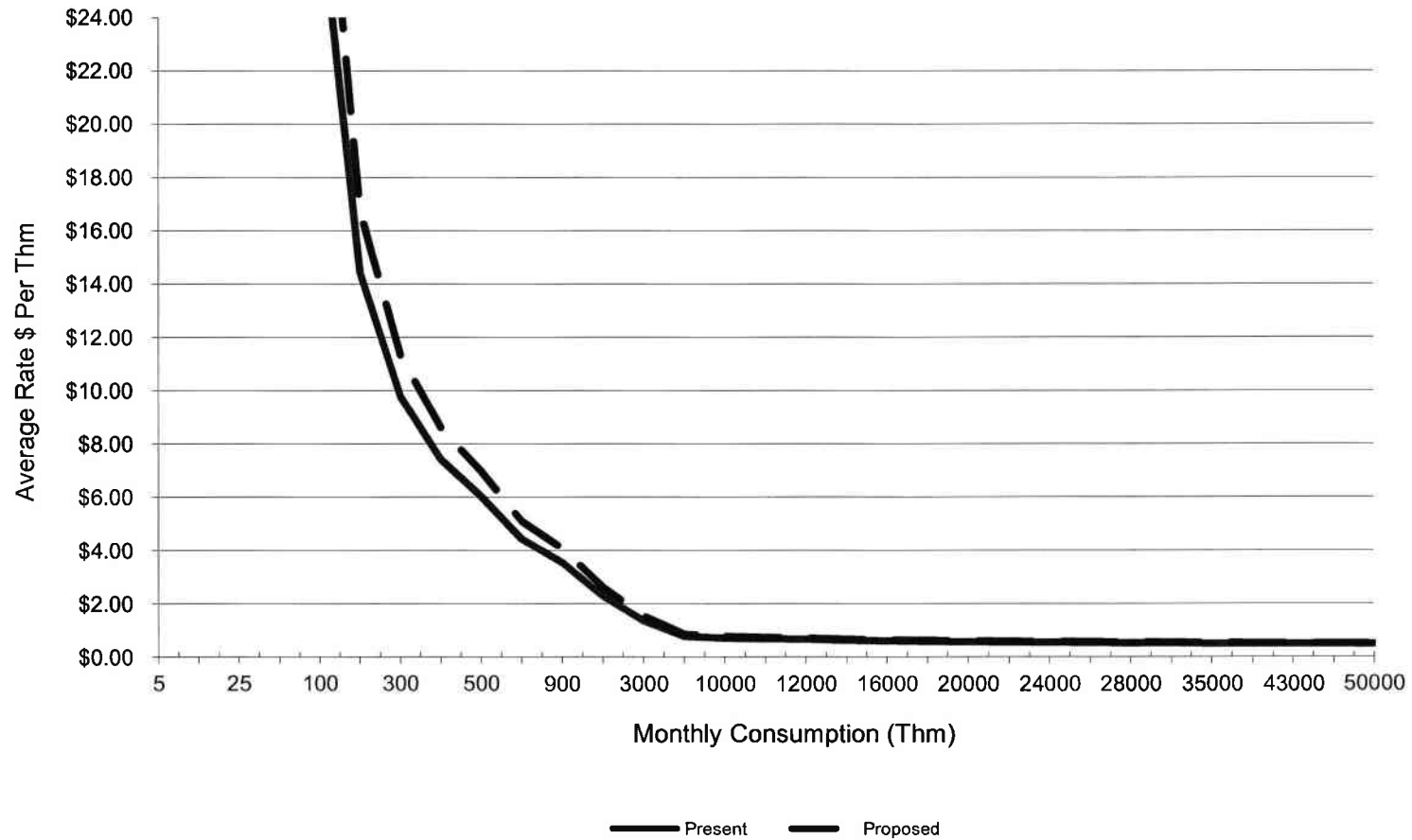
COLUMBIA GAS OF PENNSYLVANIA, INC  
PRESENT AND PROPOSED RATES  
Large General Sales Service (>110,000 and ≤540,000 Thms Annually)



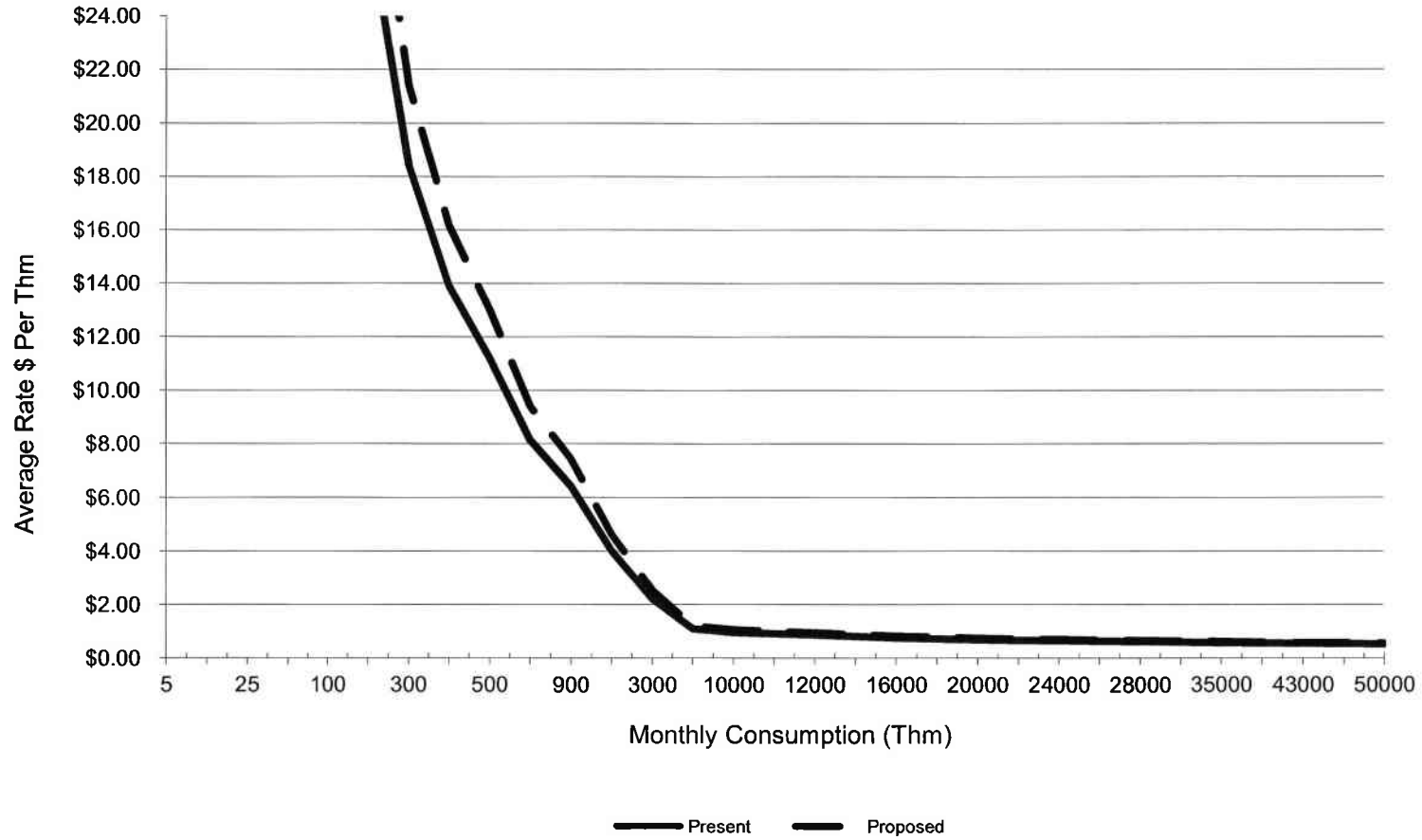
COLUMBIA GAS OF PENNSYLVANIA, INC  
PRESENT AND PROPOSED RATES  
Large General Sales Service (>540,000 and ≤1,074,000 Thms Annually)



COLUMBIA GAS OF PENNSYLVANIA, INC  
PRESENT AND PROPOSED RATES  
Large General Sales Service (>1,074,000 Thms and ≤3,400,000 Thms Annually)

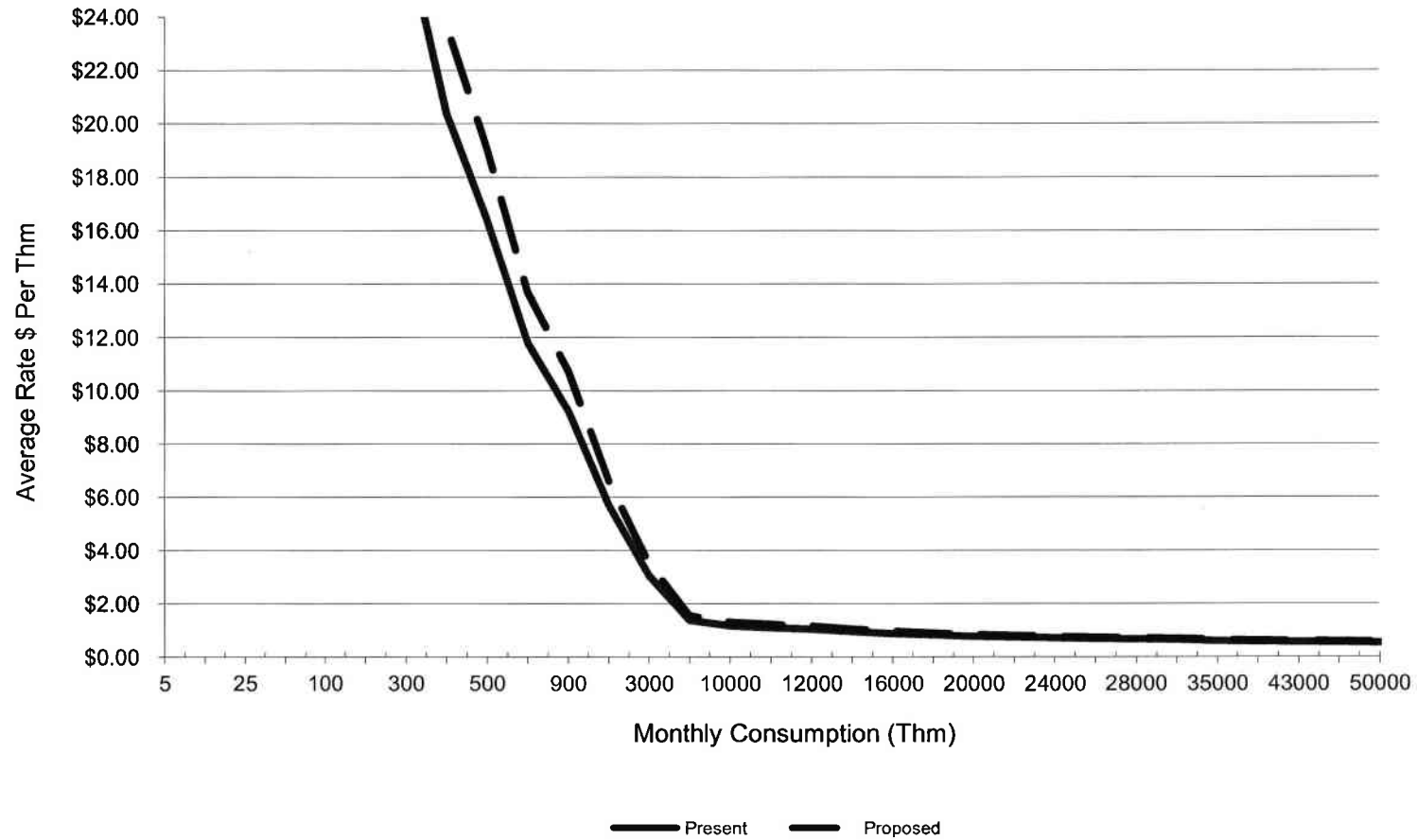


COLUMBIA GAS OF PENNSYLVANIA, INC  
PRESENT AND PROPOSED RATES  
Large General Sales Service (>3,400,000 and ≤7,500,000 Thms Annually)





COLUMBIA GAS OF PENNSYLVANIA, INC  
PRESENT AND PROPOSED RATES  
Large General Sales Service (>7,500,000 Thms Annually)



COLUMBIA GAS OF PENNSYLVANIA, INC.  
 COMPARISON OF MONTHLY BILLS  
 RESIDENTIAL SALES SERVICE

	PRESENT RATES	PROPOSED RATES
CUSTOMER CHARGE	\$ 16.75	\$ 19.51
COMMODITY CHARGE	\$ 0.47806	\$ 0.56530
RIDER USP	\$ 0.06621	\$ 0.07726
RIDER PGCC	\$ 0.27354	\$ 0.27354
RIDER PGDC	\$ 0.10451	\$ 0.10451
MERCHANT FUNCTION CHARGE	\$ 0.00416	\$ 0.00416
GAS PROCUREMENT CHG (NON-CAP)	\$ 0.00695	\$ 0.00695
RIDER CC	\$ 0.00010	\$ 0.00010
COMMODITY E-FACTOR	\$ (0.06811)	\$ (0.06811)
STATE TAX ADJUSTMENT	0.000%	0.000%

THM	Present \$	Proposed \$	Present \$/Thm	Proposed \$/Thm	DIFFERENCE	
					Amount \$	Percent %
Usage						
0	16.75	19.51			2.76	16.48%
1	17.61	20.47	17.61	20.47	2.86	16.24%
2	18.48	21.44	9.24	10.72	2.96	16.02%
3	19.34	22.40	6.45	7.47	3.06	15.82%
5	21.08	24.33	4.22	4.87	3.25	15.42%
8	23.67	27.22	2.96	3.40	3.55	15.00%
10	25.40	29.15	2.54	2.92	3.75	14.76%
15	29.73	33.97	1.98	2.26	4.24	14.26%
20	34.06	38.78	1.70	1.94	4.72	13.86%
25	38.39	43.60	1.54	1.74	5.21	13.57%
30	42.71	48.42	1.42	1.61	5.71	13.37%
35	47.04	53.24	1.34	1.52	6.20	13.18%
40	51.37	58.06	1.28	1.45	6.69	13.02%
45	55.69	62.88	1.24	1.40	7.19	12.91%
50	60.02	67.70	1.20	1.35	7.68	12.80%
60	68.68	77.33	1.14	1.29	8.65	12.59%
70	77.33	86.97	1.10	1.24	9.64	12.47%
80	85.98	96.60	1.07	1.21	10.62	12.35%
90	94.63	106.24	1.05	1.18	11.61	12.27%
100	103.30	115.89	1.03	1.16	12.59	12.19%
150	146.56	164.06	0.98	1.09	17.50	11.94%
200	189.83	212.25	0.95	1.06	22.42	11.81%
250	233.11	260.44	0.93	1.04	27.33	11.72%
300	276.38	308.63	0.92	1.03	32.25	11.67%
350	319.64	356.81	0.91	1.02	37.17	11.63%
400	362.92	404.99	0.91	1.01	42.07	11.59%
450	406.19	453.18	0.90	1.01	46.99	11.57%
500	449.47	501.37	0.90	1.00	51.90	11.55%
600	536.00	597.74	0.89	1.00	61.74	11.52%
700	622.55	694.11	0.89	0.99	71.56	11.49%
800	709.09	790.48	0.89	0.99	81.39	11.48%
900	795.63	886.85	0.88	0.99	91.22	11.47%
1000	882.17	983.22	0.88	0.98	101.05	11.45%
1500	1,314.89	1,465.08	0.88	0.98	150.19	11.42%
2000	1,747.59	1,946.93	0.87	0.97	199.34	11.41%
5000	4,343.85	4,838.06	0.87	0.97	494.21	11.38%

COLUMBIA GAS OF PENNSYLVANIA, INC.  
COMPARISON OF MONTHLY BILLS  
SMALL GENERAL SALES SERVICE  
LESS THAN OR EQUAL TO 6,440 THM PER YEAR

	PRESENT RATES	PROPOSED RATES
CUSTOMER CHARGE	\$ 21.25	\$ 21.25
ALL GAS CONSUMED	\$ 0.35939	\$ 0.43189
RIDER PGCC	\$ 0.27354	\$ 0.27354
RIDER PGDC	\$ 0.10451	\$ 0.10451
MERCHANT FUNCTION CHARGE	\$ 0.00102	\$ 0.00102
GAS PROCUREMENT CHARGE	\$ 0.00695	\$ 0.00695
RIDER CC	\$ 0.00010	\$ 0.00010
COMMODITY E-FACTOR	\$ (0.06811)	\$ (0.06811)
STATE TAX ADJUSTMENT	0.000%	0.000%

THM	Present \$	Proposed \$	Present \$/Thm	Proposed \$/Thm	DIFFERENCE	
					Amount \$	Percent %
Usage						
0	21.25	21.25			-	0.00%
1	21.93	22.00	21.93	22.00	0.07	0.32%
2	22.61	22.75	11.31	11.38	0.14	0.62%
3	23.29	23.50	7.76	7.83	0.21	0.90%
5	24.65	25.00	4.93	5.00	0.35	1.42%
7	26.01	26.50	3.72	3.79	0.49	1.88%
10	28.04	28.75	2.80	2.88	0.71	2.53%
15	31.43	32.50	2.10	2.17	1.07	3.40%
20	34.82	36.25	1.74	1.81	1.43	4.11%
25	38.21	40.00	1.53	1.60	1.79	4.68%
30	41.60	43.75	1.39	1.46	2.15	5.17%
35	44.99	47.50	1.29	1.36	2.51	5.58%
40	48.38	51.25	1.21	1.28	2.87	5.93%
45	51.77	55.00	1.15	1.22	3.23	6.24%
50	55.16	58.75	1.10	1.18	3.59	6.51%
60	61.93	66.25	1.03	1.10	4.32	6.98%
70	68.70	73.75	0.98	1.05	5.05	7.35%
80	75.47	81.25	0.94	1.02	5.78	7.66%
90	82.24	88.75	0.91	0.99	6.51	7.92%
100	89.01	96.25	0.89	0.96	7.24	8.13%
150	122.88	133.74	0.82	0.89	10.86	8.84%
200	156.75	171.23	0.78	0.86	14.48	9.24%
250	190.62	208.72	0.76	0.83	18.10	9.50%
300	224.49	246.21	0.75	0.82	21.72	9.68%
350	258.36	283.70	0.74	0.81	25.34	9.81%
400	292.23	321.19	0.73	0.80	28.96	9.91%
450	326.10	358.68	0.72	0.80	32.58	9.99%
500	359.97	396.17	0.72	0.79	36.20	10.06%
600	427.71	471.16	0.71	0.79	43.45	10.16%
700	495.45	546.15	0.71	0.78	50.70	10.23%
800	563.19	621.14	0.70	0.78	57.95	10.29%
900	630.93	696.13	0.70	0.77	65.20	10.33%
1000	698.67	771.12	0.70	0.77	72.45	10.37%
1500	1,037.38	1,146.08	0.69	0.76	108.70	10.48%
2000	1,376.09	1,521.04	0.69	0.76	144.95	10.53%
5000	3,408.29	3,770.74	0.68	0.75	362.45	10.63%

COLUMBIA GAS OF PENNSYLVANIA, INC.  
COMPARISON OF MONTHLY BILLS  
SMALL GENERAL SALES SERVICE  
GREATER THAN 6,440 THM AND LESS THAN OR EQUAL TO 64,400 THM PER YEAR

	PRESENT RATES	PROPOSED RATES
CUSTOMER CHARGE	\$ 48.00	\$ 57.46
ALL GAS CONSUMED	\$ 0.32246	\$ 0.36055
RIDER PGCC	\$ 0.27354	\$ 0.27354
RIDER PGDC	\$ 0.10451	\$ 0.10451
MERCHANT FUNCTION CHARGE	\$ 0.00102	\$ 0.00102
GAS PROCUREMENT CHARGE	\$ 0.00695	\$ 0.00695
RIDER CC	\$ 0.00010	\$ 0.00010
COMMODITY E-FACTOR	\$ (0.06811)	\$ (0.06811)
STATE TAX ADJUSTMENT	0.000%	0.000%

THM	Present \$	Proposed \$	Present \$/Thm	Proposed \$/Thm	DIFFERENCE	
					Amount \$	Percent %
Usage						
0	48.00	57.46			9.46	19.71%
1	48.64	58.14	48.64	58.14	9.50	19.53%
2	49.28	58.82	24.64	29.41	9.54	19.36%
3	49.92	59.50	16.64	19.83	9.58	19.19%
5	51.20	60.86	10.24	12.17	9.66	18.87%
7	52.48	62.22	7.50	8.89	9.74	18.56%
10	54.40	64.25	5.44	6.43	9.85	18.11%
15	57.60	67.64	3.84	4.51	10.04	17.43%
20	60.80	71.03	3.04	3.55	10.23	16.83%
25	64.00	74.42	2.56	2.98	10.42	16.28%
30	67.20	77.81	2.24	2.59	10.61	15.79%
35	70.40	81.20	2.01	2.32	10.80	15.34%
40	73.60	84.59	1.84	2.11	10.99	14.93%
45	76.80	87.98	1.71	1.96	11.18	14.56%
50	80.00	91.37	1.60	1.83	11.37	14.21%
60	86.40	98.16	1.44	1.64	11.76	13.61%
70	92.80	104.95	1.33	1.50	12.15	13.09%
80	99.20	111.74	1.24	1.40	12.54	12.64%
90	105.60	118.53	1.17	1.32	12.93	12.24%
100	112.00	125.32	1.12	1.25	13.32	11.89%
150	144.02	159.25	0.96	1.06	15.23	10.57%
200	176.04	193.18	0.88	0.97	17.14	9.74%
250	208.06	227.11	0.83	0.91	19.05	9.16%
300	240.08	261.04	0.80	0.87	20.96	8.73%
350	272.10	294.97	0.78	0.84	22.87	8.40%
400	304.12	328.90	0.76	0.82	24.78	8.15%
450	336.14	362.83	0.75	0.81	26.69	7.94%
500	368.16	396.76	0.74	0.79	28.60	7.77%
600	432.21	464.62	0.72	0.77	32.41	7.50%
700	496.26	532.48	0.71	0.76	36.22	7.30%
800	560.31	600.34	0.70	0.75	40.03	7.14%
900	624.36	668.20	0.69	0.74	43.84	7.02%
1000	688.41	736.06	0.69	0.74	47.65	6.92%
1500	1,008.65	1,075.35	0.67	0.72	66.70	6.61%
2000	1,328.89	1,414.64	0.66	0.71	85.75	6.45%
5000	3,250.30	3,450.32	0.65	0.69	200.02	6.15%

COLUMBIA GAS OF PENNSYLVANIA, INC.  
 COMPARISON OF MONTHLY BILLS  
 LARGE GENERAL SALES SERVICE  
 LESS THAN OR EQUAL TO 110,000 THM PER YEAR

	PRESENT RATES	PROPOSED RATES
CUSTOMER CHARGE	\$ 215.00	\$ 238.39
ALL GAS CONSUMED	\$ 0.20774	\$ 0.23073
RIDER PGCC	\$ 0.27354	\$ 0.27354
RIDER PGDC	\$ 0.10451	\$ 0.10451
GAS PROCUREMENT CHARGE	\$ 0.00695	\$ 0.00695
COMMODITY E-FACTOR	\$ (0.06811)	\$ (0.06811)
STATE TAX ADJUSTMENT	0.000%	0.000%

THM	Present \$	Proposed \$	Present \$/Thm	Proposed \$/Thm	DIFFERENCE	
					Amount \$	Percent %
Usage						
0	215.00	238.39			23.39	10.88%
5	217.62	241.12	43.52	48.22	23.50	10.80%
10	220.24	243.85	22.02	24.39	23.61	10.72%
25	228.11	252.06	9.12	10.08	23.95	10.50%
50	241.22	265.75	4.82	5.32	24.53	10.17%
100	267.45	293.13	2.67	2.93	25.68	9.60%
200	319.91	347.89	1.60	1.74	27.98	8.75%
300	372.37	402.65	1.24	1.34	30.28	8.13%
400	424.83	457.41	1.06	1.14	32.58	7.67%
500	477.29	512.17	0.95	1.02	34.88	7.31%
700	582.22	621.70	0.83	0.89	39.48	6.78%
900	687.15	731.23	0.76	0.81	44.08	6.41%
1500	1,001.92	1,059.80	0.67	0.71	57.88	5.78%
3000	1,788.87	1,881.24	0.60	0.63	92.37	5.16%
8000	4,412.02	4,619.34	0.55	0.58	207.32	4.70%
10000	5,461.28	5,714.58	0.55	0.57	253.30	4.64%
11000	5,985.91	6,262.20	0.54	0.57	276.29	4.62%
12000	6,510.54	6,809.82	0.54	0.57	299.28	4.60%
14000	7,559.80	7,905.06	0.54	0.56	345.26	4.57%
16000	8,609.06	9,000.30	0.54	0.56	391.24	4.54%
18000	9,658.32	10,095.54	0.54	0.56	437.22	4.53%
20000	10,707.58	11,190.78	0.54	0.56	483.20	4.51%
22000	11,756.84	12,286.02	0.53	0.56	529.18	4.50%
24000	12,806.10	13,381.26	0.53	0.56	575.16	4.49%
26000	13,855.36	14,476.50	0.53	0.56	621.14	4.48%
28000	14,904.62	15,571.74	0.53	0.56	667.12	4.48%
30000	15,953.88	16,666.98	0.53	0.56	713.10	4.47%
35000	18,577.03	19,405.08	0.53	0.55	828.05	4.46%
40000	21,200.18	22,143.18	0.53	0.55	943.00	4.45%
43000	22,774.07	23,786.04	0.53	0.55	1,011.97	4.44%
45000	23,823.33	24,881.28	0.53	0.55	1,057.95	4.44%
50000	26,446.48	27,619.38	0.53	0.55	1,172.90	4.43%
54000	28,545.00	29,809.86	0.53	0.55	1,264.86	4.43%
60000	31,692.78	33,095.58	0.53	0.55	1,402.80	4.43%
70000	36,939.08	38,571.78	0.53	0.55	1,632.70	4.42%
80000	42,185.38	44,047.98	0.53	0.55	1,862.60	4.42%
90000	47,431.68	49,524.18	0.53	0.55	2,092.50	4.41%
95000	50,054.83	52,262.28	0.53	0.55	2,207.45	4.41%
100000	52,677.98	55,000.38	0.53	0.55	2,322.40	4.41%
108000	56,875.02	59,381.34	0.53	0.55	2,506.32	4.41%
110000	57,924.28	60,476.58	0.53	0.55	2,552.30	4.41%

COLUMBIA GAS OF PENNSYLVANIA, INC.  
 COMPARISON OF MONTHLY BILLS  
 LARGE GENERAL SALES SERVICE  
 GREATER THAN 110,000 THM AND LESS THAN OR EQUAL TO 540,000 THM PER YEAR

	PRESENT RATES	PROPOSED RATES
CUSTOMER CHARGE	\$ 685.00	\$ 759.53
ALL GAS CONSUMED	\$ 0.19422	\$ 0.21572
RIDER PGCC	\$ 0.27354	\$ 0.27354
RIDER PGDC	\$ 0.10451	\$ 0.10451
GAS PROCUREMENT CHARGE	\$ 0.00695	\$ 0.00695
COMMODITY E-FACTOR	\$ (0.06811)	\$ (0.06811)
STATE TAX ADJUSTMENT	0.000%	0.000%

THM	Present \$	Proposed \$	Present \$/Thm	Proposed \$/Thm	DIFFERENCE	
					Amount \$	Percent %
Usage						
0	685.00	759.53			74.53	10.88%
5	687.55	762.19	137.51	152.44	74.64	10.86%
10	690.10	764.85	69.01	76.49	74.75	10.83%
25	697.76	772.84	27.91	30.91	75.08	10.76%
50	710.54	786.15	14.21	15.72	75.61	10.64%
100	736.09	812.78	7.36	8.13	76.69	10.42%
200	787.20	866.04	3.94	4.33	78.84	10.02%
300	838.31	919.30	2.79	3.06	80.99	9.66%
400	889.42	972.56	2.22	2.43	83.14	9.35%
500	940.53	1,025.82	1.88	2.05	85.29	9.07%
700	1,042.75	1,132.34	1.49	1.62	89.59	8.59%
900	1,144.97	1,238.86	1.27	1.38	93.89	8.20%
1500	1,451.63	1,558.42	0.97	1.04	106.79	7.36%
3000	2,218.30	2,357.34	0.74	0.79	139.04	6.27%
8000	4,773.85	5,020.39	0.60	0.63	246.54	5.16%
10000	5,796.07	6,085.61	0.58	0.61	289.54	5.00%
11000	6,307.18	6,618.22	0.57	0.60	311.04	4.93%
12000	6,818.29	7,150.83	0.57	0.60	332.54	4.88%
14000	7,840.51	8,216.05	0.56	0.59	375.54	4.79%
16000	8,862.73	9,281.27	0.55	0.58	418.54	4.72%
18000	9,884.95	10,346.49	0.55	0.57	461.54	4.67%
20000	10,907.17	11,411.71	0.55	0.57	504.54	4.63%
22000	11,929.39	12,476.93	0.54	0.57	547.54	4.59%
24000	12,951.61	13,542.15	0.54	0.56	590.54	4.56%
26000	13,973.83	14,607.37	0.54	0.56	633.54	4.53%
28000	14,996.05	15,672.59	0.54	0.56	676.54	4.51%
30000	16,018.27	16,737.81	0.53	0.56	719.54	4.49%
35000	18,573.82	19,400.86	0.53	0.55	827.04	4.45%
40000	21,129.37	22,063.91	0.53	0.55	934.54	4.42%
43000	22,662.70	23,661.74	0.53	0.55	999.04	4.41%
45000	23,684.92	24,726.96	0.53	0.55	1,042.04	4.40%
50000	26,240.47	27,390.01	0.52	0.55	1,149.54	4.38%
54000	28,284.91	29,520.45	0.52	0.55	1,235.54	4.37%
60000	31,351.57	32,716.11	0.52	0.55	1,364.54	4.35%
70000	36,462.67	38,042.21	0.52	0.54	1,579.54	4.33%
80000	41,573.77	43,368.31	0.52	0.54	1,794.54	4.32%
90000	46,684.87	48,694.41	0.52	0.54	2,009.54	4.30%
95000	49,240.42	51,357.46	0.52	0.54	2,117.04	4.30%
100000	51,795.97	54,020.51	0.52	0.54	2,224.54	4.29%
108000	55,884.85	58,281.39	0.52	0.54	2,396.54	4.29%
150000	77,351.47	80,651.01	0.52	0.54	3,299.54	4.27%
200000	102,906.97	107,281.51	0.51	0.54	4,374.54	4.25%
250000	128,462.47	133,912.01	0.51	0.54	5,449.54	4.24%
300000	154,017.97	160,542.51	0.51	0.54	6,524.54	4.24%
350000	179,573.47	187,173.01	0.51	0.53	7,599.54	4.23%
400000	205,128.97	213,803.51	0.51	0.53	8,674.54	4.23%
450000	230,684.47	240,434.01	0.51	0.53	9,749.54	4.23%
500000	256,239.97	267,064.51	0.51	0.53	10,824.54	4.22%

COLUMBIA GAS OF PENNSYLVANIA, INC.  
 COMPARISON OF MONTHLY BILLS  
 LARGE GENERAL SALES SERVICE  
 GREATER THAN 540,000 THM AND LESS THAN OR EQUAL TO 1,074,000 THM PER YEAR

	PRESENT RATES	PROPOSED RATES
CUSTOMER CHARGE	\$ 1,800.00	\$ 2,096.28
ALL GAS CONSUMED	\$ 0.12001	\$ 0.13972
RIDER PGCC	\$ 0.27354	\$ 0.27354
RIDER PGDC	\$ 0.10451	\$ 0.10451
GAS PROCUREMENT CHARGE	\$ 0.00695	\$ 0.00695
COMMODITY E-FACTOR	\$ (0.06811)	\$ (0.06811)
STATE TAX ADJUSTMENT	0.000%	0.000%

THM Usage	Present \$	Proposed \$	Present \$/Thm	Proposed \$/Thm	DIFFERENCE	
					Amount \$	Percent %
0	1,800.00	2,096.28			296.28	16.46%
5	1,802.18	2,098.56	360.44	419.71	296.38	16.45%
10	1,804.36	2,100.84	180.44	210.08	296.48	16.43%
25	1,810.91	2,107.69	72.44	84.31	296.78	16.39%
50	1,821.83	2,119.10	36.44	42.38	297.27	16.32%
100	1,843.67	2,141.93	18.44	21.42	298.26	16.18%
200	1,887.36	2,187.59	9.44	10.94	300.23	15.91%
300	1,931.05	2,233.25	6.44	7.44	302.20	15.65%
400	1,974.74	2,278.91	4.94	5.70	304.17	15.40%
500	2,018.43	2,324.57	4.04	4.65	306.14	15.17%
700	2,105.81	2,415.89	3.01	3.45	310.08	14.72%
900	2,193.19	2,507.21	2.44	2.79	314.02	14.32%
1500	2,455.33	2,781.17	1.64	1.85	325.84	13.27%
3000	3,110.69	3,466.09	1.04	1.16	355.40	11.43%
8000	5,295.19	5,749.14	0.66	0.72	453.95	8.57%
10000	6,168.99	6,662.36	0.62	0.67	493.37	8.00%
11000	6,605.89	7,118.97	0.60	0.65	513.08	7.77%
12000	7,042.79	7,575.58	0.59	0.63	532.79	7.57%
14000	7,916.59	8,488.80	0.57	0.61	572.21	7.23%
16000	8,790.39	9,402.02	0.55	0.59	611.63	6.96%
18000	9,664.19	10,315.24	0.54	0.57	651.05	6.74%
20000	10,537.99	11,228.46	0.53	0.56	690.47	6.55%
22000	11,411.79	12,141.68	0.52	0.55	729.89	6.40%
24000	12,285.59	13,054.90	0.51	0.54	769.31	6.26%
26000	13,159.39	13,968.12	0.51	0.54	808.73	6.15%
28000	14,033.19	14,881.34	0.50	0.53	848.15	6.04%
30000	14,906.99	15,794.56	0.50	0.53	887.57	5.95%
35000	17,091.49	18,077.61	0.49	0.52	986.12	5.77%
40000	19,275.99	20,360.66	0.48	0.51	1,084.67	5.63%
43000	20,586.69	21,730.49	0.48	0.51	1,143.80	5.56%
45000	21,460.49	22,643.71	0.48	0.50	1,183.22	5.51%
50000	23,644.99	24,926.76	0.47	0.50	1,281.77	5.42%
54000	25,392.59	26,753.20	0.47	0.50	1,360.61	5.36%
60000	28,013.99	29,492.86	0.47	0.49	1,478.87	5.28%
70000	32,382.99	34,058.96	0.46	0.49	1,675.97	5.18%
80000	36,751.99	38,625.06	0.46	0.48	1,873.07	5.10%
90000	41,120.99	43,191.16	0.46	0.48	2,070.17	5.03%
95000	43,305.49	45,474.21	0.46	0.48	2,168.72	5.01%
100000	45,489.99	47,757.26	0.45	0.48	2,267.27	4.98%
108000	48,985.19	51,410.14	0.45	0.48	2,424.95	4.95%
150000	67,334.99	70,587.76	0.45	0.47	3,252.77	4.83%
200000	89,179.99	93,418.26	0.45	0.47	4,238.27	4.75%
250000	111,024.99	116,248.76	0.44	0.46	5,223.77	4.71%
300000	132,869.99	139,079.26	0.44	0.46	6,209.27	4.67%
350000	154,714.99	161,909.76	0.44	0.46	7,194.77	4.65%
400000	176,559.99	184,740.26	0.44	0.46	8,180.27	4.63%
450000	198,404.99	207,570.76	0.44	0.46	9,165.77	4.62%
500000	220,249.99	230,401.26	0.44	0.46	10,151.27	4.61%

COLUMBIA GAS OF PENNSYLVANIA, INC.  
COMPARISON OF MONTHLY BILLS  
LARGE GENERAL SALES SERVICE  
GREATER THAN 1,074,000 THM AND LESS THAN OR EQUAL TO 3,400,000 THM PER YEAR

	PRESENT RATES	PROPOSED RATES
CUSTOMER CHARGE	\$ 2,800.00	\$ 3,260.88
ALL GAS CONSUMED	\$ 0.10645	\$ 0.12395
RIDER PGCC	\$ 0.27354	\$ 0.27354
RIDER PGDC	\$ 0.10451	\$ 0.10451
GAS PROCUREMENT CHARGE	\$ 0.00695	\$ 0.00695
COMMODITY E-FACTOR	\$ (0.06811)	\$ (0.06811)
STATE TAX ADJUSTMENT	0.000%	0.000%

THM	Present \$	Proposed \$	Present \$/Thm	Proposed \$/Thm	DIFFERENCE	
					Amount \$	Percent %
Usage						
0	2,800.00	3,260.88			460.88	16.46%
5	2,802.11	3,263.08	560.42	652.62	460.97	16.45%
10	2,804.22	3,265.28	280.42	326.53	461.06	16.44%
25	2,810.57	3,271.89	112.42	130.88	461.32	16.41%
50	2,821.15	3,282.91	56.42	65.66	461.76	16.37%
100	2,842.31	3,304.95	28.42	33.05	462.64	16.28%
200	2,884.65	3,349.04	14.42	16.75	464.39	16.10%
300	2,926.99	3,393.13	9.76	11.31	466.14	15.93%
400	2,969.33	3,437.22	7.42	8.59	467.89	15.76%
500	3,011.67	3,481.31	6.02	6.96	469.64	15.59%
700	3,096.34	3,569.48	4.42	5.10	473.14	15.28%
900	3,181.01	3,657.65	3.53	4.06	476.64	14.98%
1500	3,435.01	3,922.15	2.29	2.61	487.14	14.18%
3000	4,070.03	4,583.42	1.36	1.53	513.39	12.61%
8000	6,186.73	6,787.62	0.77	0.85	600.89	9.71%
10000	7,033.41	7,669.30	0.70	0.77	635.89	9.04%
11000	7,456.75	8,110.14	0.68	0.74	653.39	8.76%
12000	7,880.09	8,550.98	0.66	0.71	670.89	8.51%
14000	8,726.77	9,432.66	0.62	0.67	705.89	8.09%
16000	9,573.45	10,314.34	0.60	0.64	740.89	7.74%
18000	10,420.13	11,196.02	0.58	0.62	775.89	7.45%
20000	11,266.81	12,077.70	0.56	0.60	810.89	7.20%
22000	12,113.49	12,959.38	0.55	0.59	845.89	6.98%
24000	12,960.17	13,841.06	0.54	0.58	880.89	6.80%
26000	13,806.85	14,722.74	0.53	0.57	915.89	6.63%
28000	14,653.53	15,604.42	0.52	0.56	950.89	6.49%
30000	15,500.21	16,486.10	0.52	0.55	985.89	6.36%
35000	17,616.91	18,690.30	0.50	0.53	1,073.39	6.09%
40000	19,733.61	20,894.50	0.49	0.52	1,160.89	5.88%
43000	21,003.63	22,217.02	0.49	0.52	1,213.39	5.78%
45000	21,850.31	23,098.70	0.49	0.51	1,248.39	5.71%
50000	23,967.01	25,302.90	0.48	0.51	1,335.89	5.57%
54000	25,660.37	27,066.26	0.48	0.50	1,405.89	5.48%
60000	28,200.41	29,711.30	0.47	0.50	1,510.89	5.36%
70000	32,433.81	34,119.70	0.46	0.49	1,685.89	5.20%
80000	36,667.21	38,528.10	0.46	0.48	1,860.89	5.08%
90000	40,900.61	42,936.50	0.45	0.48	2,035.89	4.98%
95000	43,017.31	45,140.70	0.45	0.48	2,123.39	4.94%
100000	45,134.01	47,344.90	0.45	0.47	2,210.89	4.90%
108000	48,520.73	50,871.62	0.45	0.47	2,350.89	4.85%
150000	66,301.01	69,386.90	0.44	0.46	3,085.89	4.65%
200000	87,468.01	91,428.90	0.44	0.46	3,960.89	4.53%
250000	108,635.01	113,470.90	0.43	0.45	4,835.89	4.45%
300000	129,802.01	135,512.90	0.43	0.45	5,710.89	4.40%
350000	150,969.01	157,554.90	0.43	0.45	6,585.89	4.36%
400000	172,136.01	179,596.90	0.43	0.45	7,460.89	4.33%
450000	193,303.01	201,638.90	0.43	0.45	8,335.89	4.31%
500000	214,470.01	223,680.90	0.43	0.45	9,210.89	4.29%



COLUMBIA GAS OF PENNSYLVANIA, INC.  
 COMPARISON OF MONTHLY BILLS  
 LARGE GENERAL SALES SERVICE  
 GREATER THAN 3,400,000 THM AND LESS THAN OR EQUAL TO 7,500,000 THM PER YEAR

	PRESENT RATES	PROPOSED RATES
CUSTOMER CHARGE	\$ 5,400.00	\$ 6,288.84
ALL GAS CONSUMED	\$ 0.09553	\$ 0.11123
RIDER PGCC	\$ 0.27354	\$ 0.27354
RIDER PGDC	\$ 0.10451	\$ 0.10451
GAS PROCUREMENT CHARGE	\$ 0.00695	\$ 0.00695
COMMODITY E-FACTOR	\$ (0.06811)	\$ (0.06811)
STATE TAX ADJUSTMENT	0.000%	0.000%

THM	Present \$	Proposed \$	Present \$/Thm	Proposed \$/Thm	DIFFERENCE	
					Amount \$	Percent %
Usage						
0	5,400.00	6,288.84			888.84	16.46%
5	5,402.06	6,290.98	1,080.41	1,258.20	888.92	16.46%
10	5,404.12	6,293.12	540.41	629.31	889.00	16.45%
25	5,410.30	6,299.54	216.41	251.98	889.24	16.44%
50	5,420.61	6,310.24	108.41	126.20	889.63	16.41%
100	5,441.23	6,331.64	54.41	63.32	890.41	16.36%
200	5,482.47	6,374.45	27.41	31.87	891.98	16.27%
300	5,523.71	6,417.26	18.41	21.39	893.55	16.18%
400	5,564.95	6,460.07	13.91	16.15	895.12	16.08%
500	5,606.19	6,502.88	11.21	13.01	896.69	15.99%
700	5,688.68	6,588.51	8.13	9.41	899.83	15.82%
900	5,771.17	6,674.14	6.41	7.42	902.97	15.65%
1500	6,018.62	6,931.01	4.01	4.62	912.39	15.16%
3000	6,637.26	7,573.20	2.21	2.52	935.94	14.10%
8000	8,699.36	9,713.80	1.09	1.21	1,014.44	11.66%
10000	9,524.20	10,570.04	0.95	1.06	1,045.84	10.98%
11000	9,936.62	10,998.16	0.90	1.00	1,061.54	10.68%
12000	10,349.04	11,426.28	0.86	0.95	1,077.24	10.41%
14000	11,173.88	12,282.52	0.80	0.88	1,108.64	9.92%
16000	11,998.72	13,138.76	0.75	0.82	1,140.04	9.50%
18000	12,823.56	13,995.00	0.71	0.78	1,171.44	9.14%
20000	13,648.40	14,851.24	0.68	0.74	1,202.84	8.81%
22000	14,473.24	15,707.48	0.66	0.71	1,234.24	8.53%
24000	15,298.08	16,563.72	0.64	0.69	1,265.64	8.27%
26000	16,122.92	17,419.96	0.62	0.67	1,297.04	8.04%
28000	16,947.76	18,276.20	0.61	0.65	1,328.44	7.84%
30000	17,772.60	19,132.44	0.59	0.64	1,359.84	7.65%
35000	19,834.70	21,273.04	0.57	0.61	1,438.34	7.25%
40000	21,896.80	23,413.64	0.55	0.59	1,516.84	6.93%
43000	23,134.06	24,698.00	0.54	0.57	1,563.94	6.76%
45000	23,958.90	25,554.24	0.53	0.57	1,595.34	6.66%
50000	26,021.00	27,694.84	0.52	0.55	1,673.84	6.43%
54000	27,670.68	29,407.32	0.51	0.54	1,736.64	6.28%
60000	30,145.20	31,976.04	0.50	0.53	1,830.84	6.07%
70000	34,269.40	36,257.24	0.49	0.52	1,987.84	5.80%
80000	38,393.60	40,538.44	0.48	0.51	2,144.84	5.59%
90000	42,517.80	44,819.64	0.47	0.50	2,301.84	5.41%
95000	44,579.90	46,960.24	0.47	0.49	2,380.34	5.34%
100000	46,642.00	49,100.84	0.47	0.49	2,458.84	5.27%
108000	49,941.36	52,525.80	0.46	0.49	2,584.44	5.17%
150000	67,263.00	70,506.84	0.45	0.47	3,243.84	4.82%
200000	87,884.00	91,912.84	0.44	0.46	4,028.84	4.58%
250000	108,505.00	113,318.84	0.43	0.45	4,813.84	4.44%
300000	129,126.00	134,724.84	0.43	0.45	5,598.84	4.34%
350000	149,747.00	156,130.84	0.43	0.45	6,383.84	4.26%
400000	170,368.00	177,536.84	0.43	0.44	7,168.84	4.21%
450000	190,989.00	198,942.84	0.42	0.44	7,953.84	4.16%
500000	211,610.00	220,348.84	0.42	0.44	8,738.84	4.13%

COLUMBIA GAS OF PENNSYLVANIA, INC.  
 COMPARISON OF MONTHLY BILLS  
 LARGE GENERAL SALES SERVICE  
 GREATER THAN 7,500,000 THM

	PRESENT RATES	PROPOSED RATES
CUSTOMER CHARGE	\$ 8,000.00	\$ 9,316.80
ALL GAS CONSUMED	\$ 0.05684	\$ 0.06618
RIDER PGCC	\$ 0.27354	\$ 0.27354
RIDER PGDC	\$ 0.10451	\$ 0.10451
GAS PROCUREMENT CHARGE	\$ 0.00695	\$ 0.00695
COMMODITY E-FACTOR	\$ (0.06811)	\$ (0.06811)
STATE TAX ADJUSTMENT	0.000%	0.000%

THM	Present \$	Proposed \$	Present \$/Thm	Proposed \$/Thm	DIFFERENCE	
					Amount \$	Percent %
Usage						
0	8,000.00	9,316.80			1,316.80	16.46%
5	8,001.86	9,318.71	1,600.37	1,863.74	1,316.85	16.46%
10	8,003.72	9,320.62	800.37	932.06	1,316.90	16.45%
25	8,009.32	9,326.36	320.37	373.05	1,317.04	16.44%
50	8,018.66	9,335.93	160.37	186.72	1,317.27	16.43%
100	8,037.34	9,355.08	80.37	93.55	1,317.74	16.40%
200	8,074.71	9,393.39	40.37	46.97	1,318.68	16.33%
300	8,112.08	9,431.70	27.04	31.44	1,319.62	16.27%
400	8,149.45	9,470.01	20.37	23.68	1,320.56	16.20%
500	8,186.82	9,508.32	16.37	19.02	1,321.50	16.14%
700	8,261.57	9,584.94	11.80	13.69	1,323.37	16.02%
900	8,336.32	9,661.56	9.26	10.74	1,325.24	15.90%
1500	8,560.55	9,891.40	5.71	6.59	1,330.85	15.55%
3000	9,121.15	10,466.01	3.04	3.49	1,344.86	14.74%
8000	10,989.80	12,381.36	1.37	1.55	1,391.56	12.66%
10000	11,737.26	13,147.50	1.17	1.31	1,410.24	12.02%
11000	12,110.99	13,530.57	1.10	1.23	1,419.58	11.72%
12000	12,484.72	13,913.64	1.04	1.16	1,428.92	11.45%
14000	13,232.18	14,679.78	0.95	1.05	1,447.60	10.94%
16000	13,979.64	15,445.92	0.87	0.97	1,466.28	10.49%
18000	14,727.10	16,212.06	0.82	0.90	1,484.96	10.08%
20000	15,474.56	16,978.20	0.77	0.85	1,503.64	9.72%
22000	16,222.02	17,744.34	0.74	0.81	1,522.32	9.38%
24000	16,969.48	18,510.48	0.71	0.77	1,541.00	9.08%
26000	17,716.94	19,276.62	0.68	0.74	1,559.68	8.80%
28000	18,464.40	20,042.76	0.66	0.72	1,578.36	8.55%
30000	19,211.86	20,808.90	0.64	0.69	1,597.04	8.31%
35000	21,080.51	22,724.25	0.60	0.65	1,643.74	7.80%
40000	22,949.16	24,639.60	0.57	0.62	1,690.44	7.37%
43000	24,070.35	25,788.81	0.56	0.60	1,718.46	7.14%
45000	24,817.81	26,554.95	0.55	0.59	1,737.14	7.00%
50000	26,686.46	28,470.30	0.53	0.57	1,783.84	6.68%
54000	28,181.38	30,002.58	0.52	0.56	1,821.20	6.46%
60000	30,423.76	32,301.00	0.51	0.54	1,877.24	6.17%
70000	34,161.06	36,131.70	0.49	0.52	1,970.64	5.77%
80000	37,898.36	39,962.40	0.47	0.50	2,064.04	5.45%
90000	41,635.66	43,793.10	0.46	0.49	2,157.44	5.18%
95000	43,504.31	45,708.45	0.46	0.48	2,204.14	5.07%
100000	45,372.96	47,623.80	0.45	0.48	2,250.84	4.96%
108000	48,362.80	50,688.36	0.45	0.47	2,325.56	4.81%
150000	64,059.46	66,777.30	0.43	0.45	2,717.84	4.24%
200000	82,745.96	85,930.80	0.41	0.43	3,184.84	3.85%
250000	101,432.46	105,084.30	0.41	0.42	3,651.84	3.60%
300000	120,118.96	124,237.80	0.40	0.41	4,118.84	3.43%
350000	138,805.46	143,391.30	0.40	0.41	4,585.84	3.30%
400000	157,491.96	162,544.80	0.39	0.41	5,052.84	3.21%
450000	176,178.46	181,698.30	0.39	0.40	5,519.84	3.13%
500000	194,864.96	200,851.80	0.39	0.40	5,986.84	3.07%

**COLUMBIA GAS OF PENNSYLVANIA, INC**  
**53.53 III. BALANCE SHEET AND OPERATING STATEMENT**  
**E. GAS UTILITIES**

5. Submit a schedule showing the sources of gas supply associated with Annualized Mcf sales.

Response: The following two schedules show the sources of supply expected to be used to meet Columbia's sales requirements for two twelve-month periods. Schedule 1 is for the Future Test Year and is for the twelve-month period ending November 30, 2016. Schedule 2 is for the Fully Forecasted Rate Year which is for the twelve-month period ending December 31, 2017. Consistent with the fact that Columbia now bills in therms rather than cubic feet, the information is provided in MDth rather than Mcf.

**Schedule 1: Twelve Month Ending November 30, 2016**

	<u>(MDth)</u>
Annualized Sales (Exhibit No. 103)	34,497
<b><u>Sources of Gas</u></b>	
Interstate Pipeline Purchases	33,503
City Gate Purchases	0
Local Production	256
Storage	(738)
<b>Total</b>	<b>34,497</b>

**Schedule 2: Twelve Month Ending December 31, 2017**

	<u>(MDth)</u>
<b>Annualized Sales (Exhibit No. 103)</b>	<b>34,474</b>
<b><u>Sources of Gas</u></b>	
<b>Interstate Pipeline Purchases</b>	<b>34,794</b>
<b>City Gate Purchases</b>	<b>0</b>
<b>Local Production</b>	<b>255</b>
<b>Storage</b>	<b>(575)</b>
<b>Total</b>	<b>34,474</b>

**COLUMBIA GAS OF PENNSYLVANIA, INC**  
**53.53 III. BALANCE SHEET AND OPERATING STATEMENT**  
**E. GAS UTILITIES**

18. If the utility has a Fuel Adjustment Clause:
- a. State the base fuel cost per MCF chargeable against basic customers' rates during the test year. If there was any change in this basic fuel charge during the test year, give details and explanation thereof.
  - b. State the amount in which the fuel adjustment clause cost per MCF exceeds the fuel cost per MCF charged in base rates at the end of the test year.
  - c. If fuel cost deferment is used at the end of the test year, give:
    - (i) The amount of deferred fuel cost contained in the operating statement that was deferred from the 12-month operating period immediately preceding the test year.
    - (ii) The amount of deferred fuel cost that was removed from the test period and deferred to the period immediately following the test year.
  - d. State the amount of Fuel Adjustment Clause revenues credited to the test year operating account.
  - e. State the amount of fuel cost charged to the operating expense account in the test year which is the basis of Fuel Adjustment Clause billings to customers in that year. Provide summary details of this charge.
  - f. From the recorded test year operating account, remove the Fuel Adjustment Clause Revenues. Also remove from the test year recorded operating account the excess of fuel cost over base rate fuel charges, which is the basis for the Fuel Adjustment charges. Explain any differences between FAC Revenues and excess fuel costs. (The above is intended to limit the operating account to existing customers' base rate revenues and expense deductions relative thereto).

Response: Please see Exhibit No. 12, Schedule No.2.

**COLUMBIA GAS OF PENNSYLVANIA, INC**  
**53.53 III. BALANCE SHEET AND OPERATING STATEMENT**  
**E. GAS UTILITIES**

23. Submit a schedule showing fuel cost in excess of base compared to fuel cost recovery for the period two months prior to test year and the test year.

Response: Refer to Exhibit No. 12, Schedule No. 3.

24. Supply a detailed analysis of Purchased Gas for the test year and the twelve month period prior to the test year.

Response: See Exhibit No. 12, Schedule No. 4, Page 2 and 3, for details of Purchased Gas for the twelve months ended November 2014 and November 2015.

25. Submit calculations supporting energy cost per MCF and operating ratio used to determine increase in costs other than production to serve additional load.

Response See Exhibit No. 12, Schedule No. 2 for calculations of the initial base cost of gas (energy cost). See Exhibit No. 3 for cost adjustments.

26. Submit detailed calculations for bulk gas transmission service costs under supply and / or interconnection agreements.

Response: Columbia has no bulk gas transmission agreements.

30. Provide a schedule showing suppliers, MCF purchased, cost (small purchases From independent suppliers may be grouped); emergency purchases, listing same information; curtailments during the year; gas put into and taken out of storage; line loss, and any other gas input or output in the ordinary course of business.

Response: See response to Exhibit No. 112, Schedule No.2, Question 24, for details of gas purchases for the twelve months ended November 2014 and November 2015.

**COLUMBIA GAS OF PENNSYLVANIA, INC**  
**53.53 III. BALANCE SHEET AND OPERATING STATEMENT**  
**E. GAS UTILITIES**

31. Provide a schedule showing the determination of the fuel costs included in the base cost of fuel.

Response: Refer to Exhibit No. 12, Schedule No. 5.

36. State the amount of gas, in MCF, obtained through various suppliers in past years.

Response: See response to Exhibit No, 112, Schedule No.2, Question 24, for details of gas purchases for the twelve months ended November 2014 and November 2015.

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**53.53 IV. RATE SCHEDULE**  
**B. GAS UTILITIES**

11. Supply the net Fuel Clause Adjustment by month for the test year.

Response: Refer to Exhibit No. 12, Schedule No.6.

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**OPERATIONS AND MAINTENANCE EXPENSE ADJUSTMENTS**  
**TO THE TWELVE MONTHS ENDED DECEMBER 31, 2015**  
**ADJUSTMENTS TO PURCHASED GAS EXPENSE**

53.62

To adjust the Cost of Purchased Gas Expense to the level being recovered through base tariff rates.

Response: The adjustment to the Cost of Purchased Gas Expense for the twelve months ending November 30, 2016 is (\$2,105,981) and for twelve months ending December 31, 2017 is (\$400,362). Please see Page 2 and 3 of this schedule for detail of the adjustment by rate.



Columbia Gas of Pennsylvania, Inc.  
Operations and Maintenance Expense Adjustments  
To the Twelve Months Ended November 30, 2016  
Adjustments to Purchased Gas Expense  
53.62

(1)	Purchased Gas Costs Per Books for the Twelve Months Ended November 30, 2016			\$ 121,627,916
(2)	Purchased Gas Cost to be Recovered in Base Tariff Rates:			
	<u>Rate Schedule</u>	<u>Total Rate</u>	<u>Adjusted Volumes</u>	<u>Gas Cost</u>
	<u>Gas Supply Expense</u>			
	Residential Sales Service - RSS	3.0994	24,230,354	75,099,558
	Small General Sales Service - SGSS	3.0994	9,069,329	28,109,478
	Negotiated Sales Service- NSS	Varies	65,000	216,181
	Large General Sales Service - LGSS	3.0994	961,519	2,980,131
	Residential Distribution Service - RDS	0.7358	7,550,000	5,555,290
	Residential Distribution Service (CAP)- RCC	3.6555	2,550,182	9,322,188
	Small Commercial Distribution - SCD	0.7358	2,365,038	1,740,195
	Small General Distribution Service - SGDS	1.0451	680,198	710,875
	Total Gas Supply Expense			123,733,897
	Gas Supply Expense Adjustment			(2,105,981)

Columbia Gas of Pennsylvania, Inc.  
Operations and Maintenance Expense Adjustments  
To the Twelve Months Ended December 31, 2017  
Adjustments to Purchased Gas Expense  
53.62

(1) Purchased Gas Costs  
Per Books for the Twelve Months Ended  
December 31, 2017

\$  
123,733,897

(2) Purchased Gas Cost  
to be Recovered in Base Tariff Rates:

<u>Rate Schedule</u>	<u>Total Rate</u>	<u>Adjusted Volumes</u>	<u>Gas Cost</u>
<b><u>Gas Supply Expense</u></b>			
Residential Sales Service - RSS	3.0994	24,297,875	75,308,835
Small General Sales Service - SGSS	3.0994	9,102,215	28,211,405
Negotiated Sales Service- NSS	Varies	65,000	272,137
Large General Sales Service - LGSS	3.0994	958,127	2,969,618
Residential Distribution Service - RDS	0.7358	7,554,000	5,558,233
Residential Distribution Service (CAP) - RCC	3.6555	2,551,794	9,328,082
Small Commercial Distribution - SCD	0.7358	2,400,024	1,765,938
Small General Distribution Service - SGDS	1.0451	688,940	<u>720,012</u>
<b>Total Gas Supply Expense</b>			<b>124,134,259</b>
 <b>Gas Supply Expense Adjustment</b>			 <b>(400,362)</b>

**COLUMBIA GAS OF PENNSYLVANIA, INC**  
**SECTION 53.62 RECOVERIES OF FUEL COSTS BY GAS UTILITIES**

In addition to information otherwise required to be filed by a jurisdictional natural gas distributor with gross intrastate annual operating revenues in excess of \$40 million seeking a change in its base rates, each gas utility must also file updates to the information required by § 53.64(c) (relating to filing requirements for natural gas distributors with gross intrastate annual operating revenues in excess of \$40 million). In the case of a gas utility purchasing gas as defined at § 53.61 (a) (relating to purpose) from an affiliated interest, it shall also file updates to the information required at § 53.65 (relating to special provisions relating to natural gas distributors with gross intrastate annual operating revenues in excess of \$40 million with affiliated interests). These updates shall to be made at the time the base rate case under 66 Pa. C.S. § 1308 (relating to voluntary changes in rates) is originally filed. Deficiencies in filing will be treated as set forth at § 53.51(c) (relating to general).

Response: Please see Exhibit No. 12, Schedule No. 8.

**COLUMBIA GAS OF PENNSYLVANIA, INC.**

**53.52**

**Applicability; public utilities other than canal, turnpike, tunnel bridge and wharf companies.**

- (a) Whenever a public utility, other than a canal, turnpike, tunnel, bridge or wharf company files a tariff, revision or supplement effecting changes in the terms and conditions of service rendered or to be rendered, it shall submit to the Commission, with the tariff, revision or supplement, statements showing all of the following:
- (1) The specific reasons for each change.
  - (2) The total number of customers served by the utility.
  - (3) A calculation of the number of customers, by tariff subdivisions, whose bills will be affected by the change.
  - (4) The effect of the change on the utility's customers.
  - (5) The direct or indirect effect of the proposed change on the utility's revenues and expenses.
  - (6) The effect of the change on the service rendered by the utility.
  - (7) A list of factors considered by the utility in its determination to make the change. The list shall include a comprehensive statement about these factors were chosen and the relative importance of each. This subsection does not apply to a portion of a tariff change seeking a general rate increase as defined in 66 Pa. C.S. §1308 (relating to voluntary changes in rates).
  - (8) Studies undertaken by the utility in order to draft its proposed change. This paragraph does not apply to a portion of a tariff change seeking a general rate increase as defined in 66 Pa. C.S. §1 308.
  - (9) Customer polls taken and other documents which indicate customer acceptance and desire for the proposed change. If the poll or other documents reveal discernible public opposition, an explanation of why the change is in the public interest shall be provided
  - (10) Plans the utility has for introducing or implementing the changes with respect to its ratepayers.
  - (11) F.C.C., F.E.R.C. or Commission orders or rulings applicable to the filing.

**COLUMBIA GAS OF PENNSYLVANIA, INC.**

**53.52**

- (b) Whenever a public utility, other than a canal, turnpike, tunnel, bridge or wharf company files a tariff, revision, or supplement which will increase or decrease the bills to its customers, it shall submit in addition to the requirements of subsection (a), to the Commission, with the tariff, revision or supplement, statements showing all of the following:
- (1) The specific reason for each increase or decrease.
  - (2) The operating income statement of the utility for a 12-month period, the end of which may not be more than 120 days prior to the filing.
  - (3) A calculation of the number of customers, by tariff subdivision, whose bills will be increased.
  - (4) A calculation of the total increase, in dollars, by tariff subdivision, projected to an annual basis.
  - (5) A calculation of the number of customers, by tariff subdivision, whose bills will be decreased.
  - (6) A calculation of the total decreases, in dollars, by tariff subdivision, projected to an annual basis.

**Response:** Refer to Exhibit No. 13, Schedule No. 1.

**COLUMBIA GAS OF PENNSYLVANIA, INC**  
**53.53 II.RATE OF RETURN**  
**A. ALL UTILITIES**

13. Attach copies of the summaries of the projected two years' Company's budgets (revenues, expense, and capital).

Response:

Please see Exhibit GAS-ROR-13 for projected revenues and expenses.

Please see Exhibit GAS-ROR-14 for the projected construction budget.

**COLUMBIA GAS OF PENNSYLVANIA, INC**  
**53.53 III. BALANCE SHEET AND OPERATING STATEMENT**  
**A. ALL UTILITIES**

19. List extraordinary property losses as a separate item, not included in operating expenses or depreciation and amortization. Sufficient supporting data must be provided.

Response: See Exhibit No. 13 Schedule No. 5

39. Identify the specific witness for all statements and schedules of revenues, expenses, taxes, property, valuation, etc.

Response: Refer to Exhibit No. 13 Schedule No. 3.

40. Adjustments which are estimated shall be fully supported by basic information reasonably necessary.

Response: Refer to Exhibit No. 13 Schedule No. 4.

41. Submit a statement explaining the derivation of the amounts used for projecting future test year level of operations and submit appropriate schedules supporting the projected test year level of operation.

Response: Refer to Exhibit 13 No. Schedule No. 4.

44. Ratios, percentages, allocations and averages used in adjustments must be fully supported and identified as to source.

Response: Refer to Exhibit 13 No. Schedule No. 4.

45. Provide an explanation of any differences between the basis or procedure used in allocations of revenues, expenses, depreciation and taxes in the current rate case and that used in the prior rate case.

Response: Refer to Exhibit 13 No. Schedule No. 4.

- 46. Supply a copy of internal and independent audit reports of the test year and prior calendar year, noting any exceptions and recommendations and disposition thereof.**

**Response: Refer to Exhibit No. 13 Schedule No. 4.**



**COLUMBIA GAS OF PENNSYLVANIA, INC**  
**53.53 III. BALANCE SHEET AND OPERATING STATEMENT**  
**E. GAS UTILITIES**

27. Submit a schedule for gas producing units retired or scheduled for retirements subsequent to the test year showing station, units, Mcf capacity, hours of operation during test year, net output produced and cents/Mcf of maintenance and fuel expenses.

Response:

See Exhibit No. 13, Schedule No. 6.

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**53.53 III. BALANCE SHEET AND OPERATING STATEMENT**  
**A. ALL UTILITIES**

26. Provide a list of reports, data, or statements requested by and submitted to the Commission during and subsequent to the test year.

Response: Refer to Exhibit No. 14, Schedule No. 1

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**53.53 IV. RATE SCHEDULE**  
**B. GAS UTILITIES**

6. Supply copies of all present and proposed Gas Tariffs.

Response: Refer to Exhibit No. 14, Schedule No 2.

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**53.53 I. VALUATION**  
**A. ALL UTILITIES**

1. Provide a corporate history (include the dates of original incorporation, subsequent mergers and/or acquisitions). Indicate all counties and cities and other governmental subdivisions to which service is provided (including service areas outside the state), and the total population in the area served.

Response: See Exhibit No. 15 Schedule No. 1.

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**53.53 I. VALUATION**  
**C. GAS UTILITIES**

2. Provide an overall system map, including and labeling all measuring and regulating stations, storage facilities, production facilities, transmission and distribution mains, by size, and all interconnections with other utilities and pipelines.

Response: See Exhibit No. 15 Schedule No. 2.

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**53.53 II. RATE OF RETURN**  
**A. ALL UTILITIES**

24. Attach chart explaining Company's relationship to its affiliates (System Structure).

Response: See Exhibit No.15 Schedule No. 3.

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**53.53 III. BALANCE SHEET AND OPERATING STATEMENT**  
**E. GAS UTILITIES**

7. Provide details of respondent's attempts to recover uncollectible and delinquent accounts.

Response: Refer to Exhibit No. 16.

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**53.53 I. VALUATION**  
**C. GAS UTILITIES**

1. Provide, with respect to the scope of operations of the utility, a description of all property, including an explanation of the system's operation, and all plans for any significant future expansion, modification or other alteration of facilities.

This description should include, but not be limited to the following:

- a. If respondent has various gas services areas, indicate if they are integrated, such that the gas supply is available to all customers.
- b. Provide all pertinent data regarding company policy related to the addition of new consumers in the company's service area.
- c. Explain how respondent obtains its gas supply, as follows:
  - (i) Explain how respondent stores or manufactures gas; if applicable.
  - (ii) State whether the company has peak shaving facilities.
  - (iii) Provide details of coal-gasification programs, if any.
  - (iv) Describe the potential for emergency purchases of gas.
  - (iv) Provide the amount of gas in MCF supplied by various suppliers in the test year (include a copy of all contracts).
  - (vi) Provide the amount of gas in MCF supplied from company-owned wells during the test year.
- d. Provide plans for future supply, as follows:
  - (i) Supply details of anticipated gas supply from respondent's near-term development of gas wells, if any.
  - (ii) Provide gas supply agreements and well development ventures and identify the parties thereto.

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**53.53 I. VALUATION**  
**C. GAS UTILITIES**

- e. Indicate any anticipated curtailments and explain the reasons for the curtailments.
- f. Provide current data on any Federal Power Commission action or programs that may affect, or tend to affect, the natural gas supply to the gas utility.

Response: See Exhibit No. 17.

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**53.53 III BALANCE SHEET AND OPERATING STATEMENT**  
**E. GAS UTILITIES**

- 28. Provide a statement explaining the details of firm gas purchase (long-term) contracts with affiliated and non-affiliated utilities, including determination of costs terms of contract, and other pertinent information.

Response: See Exhibit No. 17.