

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.

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.

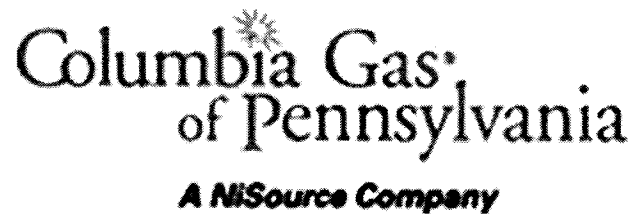
4. Set forth, in exhibit form, charts depicting the original and estimated survivor curves and a tabular presentation of the original life table plotted on the chart for each account, where the retirement rate method of analysis is utilized.
  - a. If any utility plant was excluded from the measures 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, 2018, 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, 2019, by vintage by account and including applicable depreciation reserves and accruals begins on page II-8 of Exhibit No. 109 Attachment B.



## **2018 DEPRECIATION STUDY**

CALCULATED ANNUAL DEPRECIATION  
ACCRUALS RELATED TO GAS PLANT  
AS OF NOVEMBER 30, 2018

*Prepared by:*



*Excellence Delivered As Promised*

COLUMBIA GAS OF PENNSYLVANIA, INC.  
Pittsburgh, Pennsylvania

2018 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS  
RELATED TO GAS PLANT  
AS OF NOVEMBER 30, 2018

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



*Excellence Delivered As Promised*

February 23, 2018

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

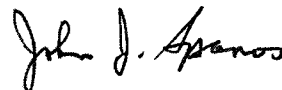
Ladies and Gentlemen:

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, 2018 are presented in the attached report. The results of our study as of November 30, 2017 are presented in our report titled "2017 Depreciation Study- Calculated Annual Depreciation Accruals Related to Gas Plant as of November 30, 2017". 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, 2018.

Respectfully submitted,

GANNETT FLEMING VALUATION  
AND RATE CONSULTANTS, LLC



JOHN J. SPANOS  
Sr. Vice President

JJS:mle

063476



## TABLE OF CONTENTS

|                                                                                                                                                                                        |       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| <b>PART I. INTRODUCTION</b> .....                                                                                                                                                      | I-1   |
| 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   |
| <br><b>PART II. ESTIMATION OF SURVIVOR CURVES</b> .....                                                                                                                                | II-1  |
| 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 |
| <br><b>PART III. SERVICE LIFE CONSIDERATIONS</b> .....                                                                                                                                 | III-1 |
| Field Trips.....                                                                                                                                                                       | III-2 |
| Judgment.....                                                                                                                                                                          | III-4 |
| <br><b>PART IV. CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION</b> .....                                                                                                               | IV-1  |
| 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  |
| <br><b>PART V. RESULTS OF STUDY</b> .....                                                                                                                                              | V-1   |
| Description of Summary Tabulations.....                                                                                                                                                | V-2   |
| Description of Detailed Tabulations.....                                                                                                                                               | V-2   |
| <br>Table 1     Summary of Estimated Survivor Curves, Original Cost, Book<br>Reserve and Calculated Annual Depreciation Accruals Related<br>to Gas Plant as of November 30, 2018 ..... | V-4   |

## TABLE OF CONTENTS, cont.

|                                                                   |                                                                                             |               |
|-------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------|
| Table 2                                                           | Bringforward to November 30, 2018, of the Book Reserve<br>as of November 30, 2017.....      | V-7           |
| Table 3                                                           | Calculation of Depreciation Accruals for the Twelve Months<br>Ended November 30, 2018 ..... | V-9           |
| Table 4                                                           | Amortization of Experienced and Estimated Net Salvage .....                                 | V-11          |
| <br><b>PART VI. SERVICE LIFE STATISTICS .....</b>                 |                                                                                             | <b>VI-1</b>   |
| <br><b>PART VII. DETAILED DEPRECIATION CALCULATIONS .....</b>     |                                                                                             | <b>VII-1</b>  |
|                                                                   | Cumulative Depreciated Original Cost.....                                                   | VII-2         |
|                                                                   | Utility Plant in Service .....                                                              | VII-7         |
| <br><b>PART VIII. EXPERIENCED AND ESTIMATED NET SALVAGE .....</b> |                                                                                             | <b>VIII-1</b> |

---

## 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, 2018.

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 2016.

#### **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 2016 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 2016 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.



---

## 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

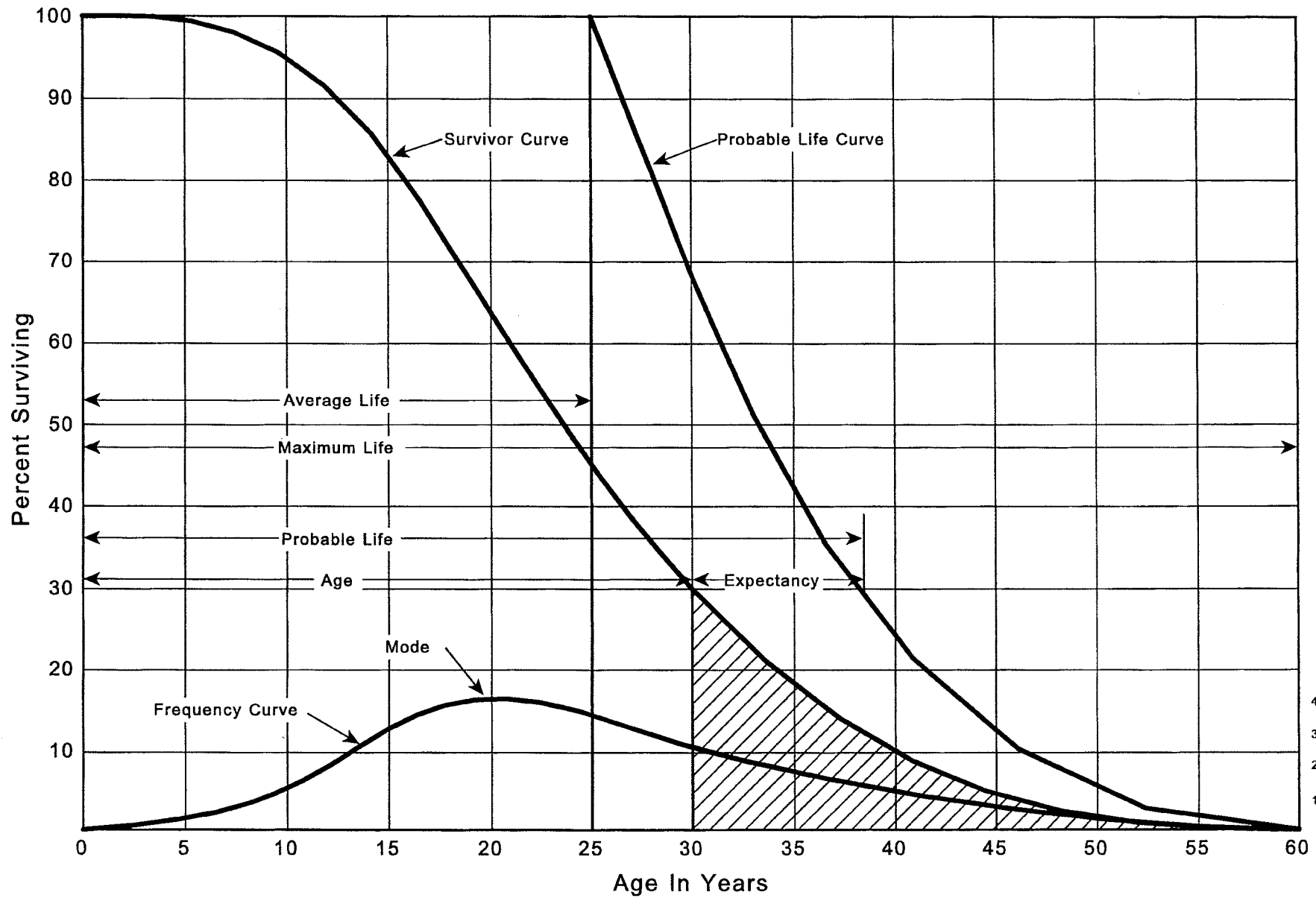


Figure 1. A Typical Survivor Curve and Derived Curves

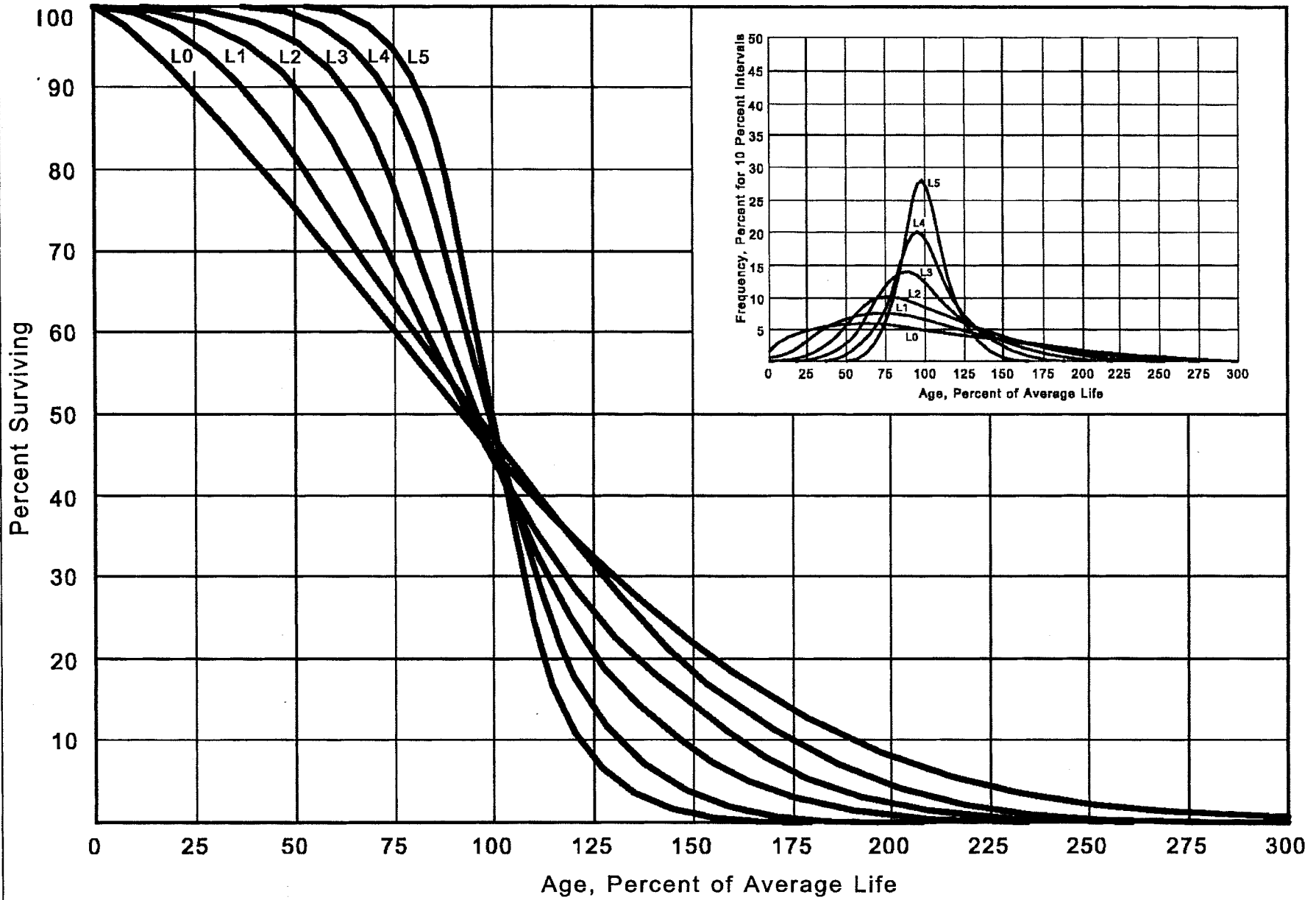


Figure 2. Left Modal or "L" Iowa Type Survivor Curves

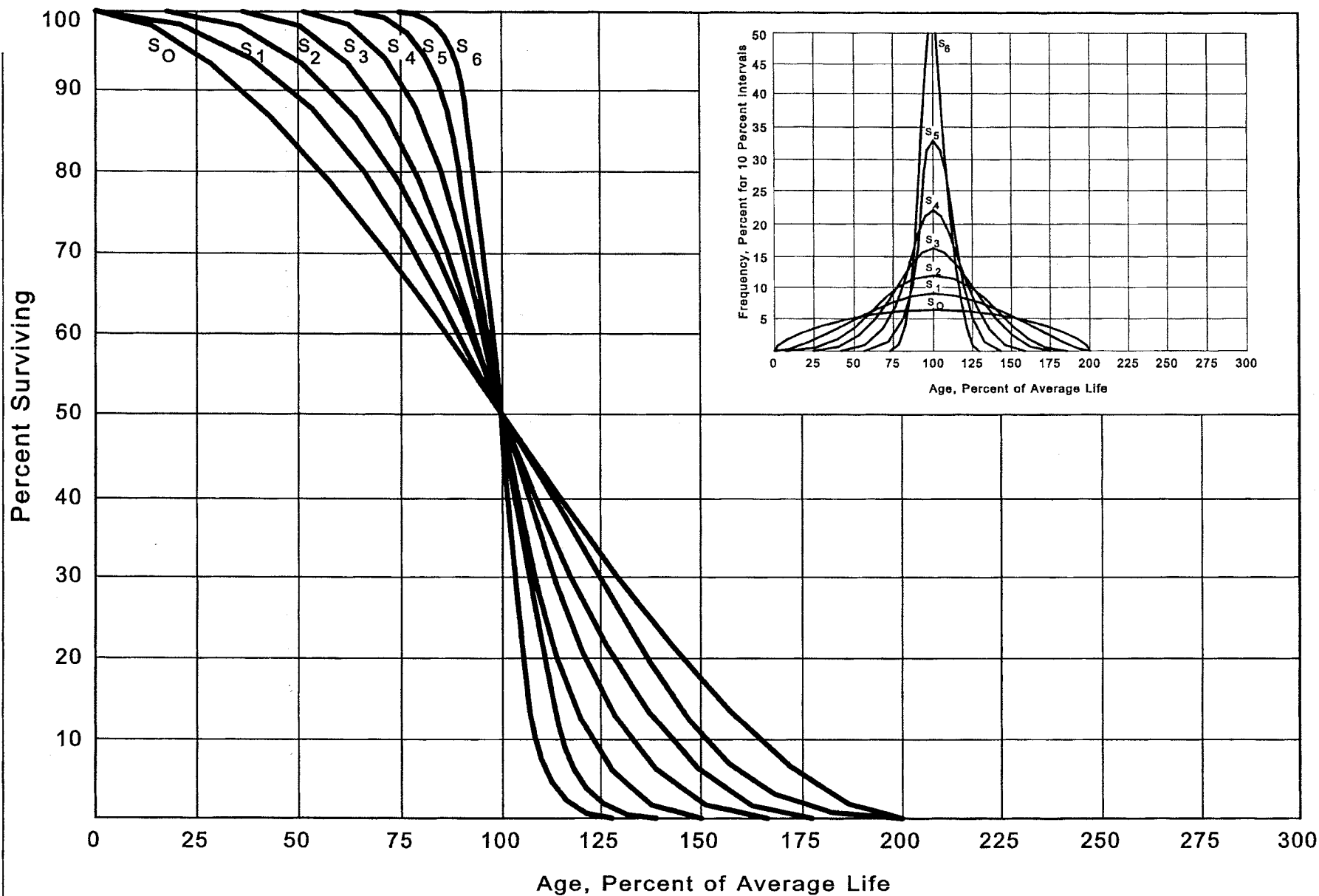


Figure 3. Symmetrical or "S" Iowa Type Survivor Curves

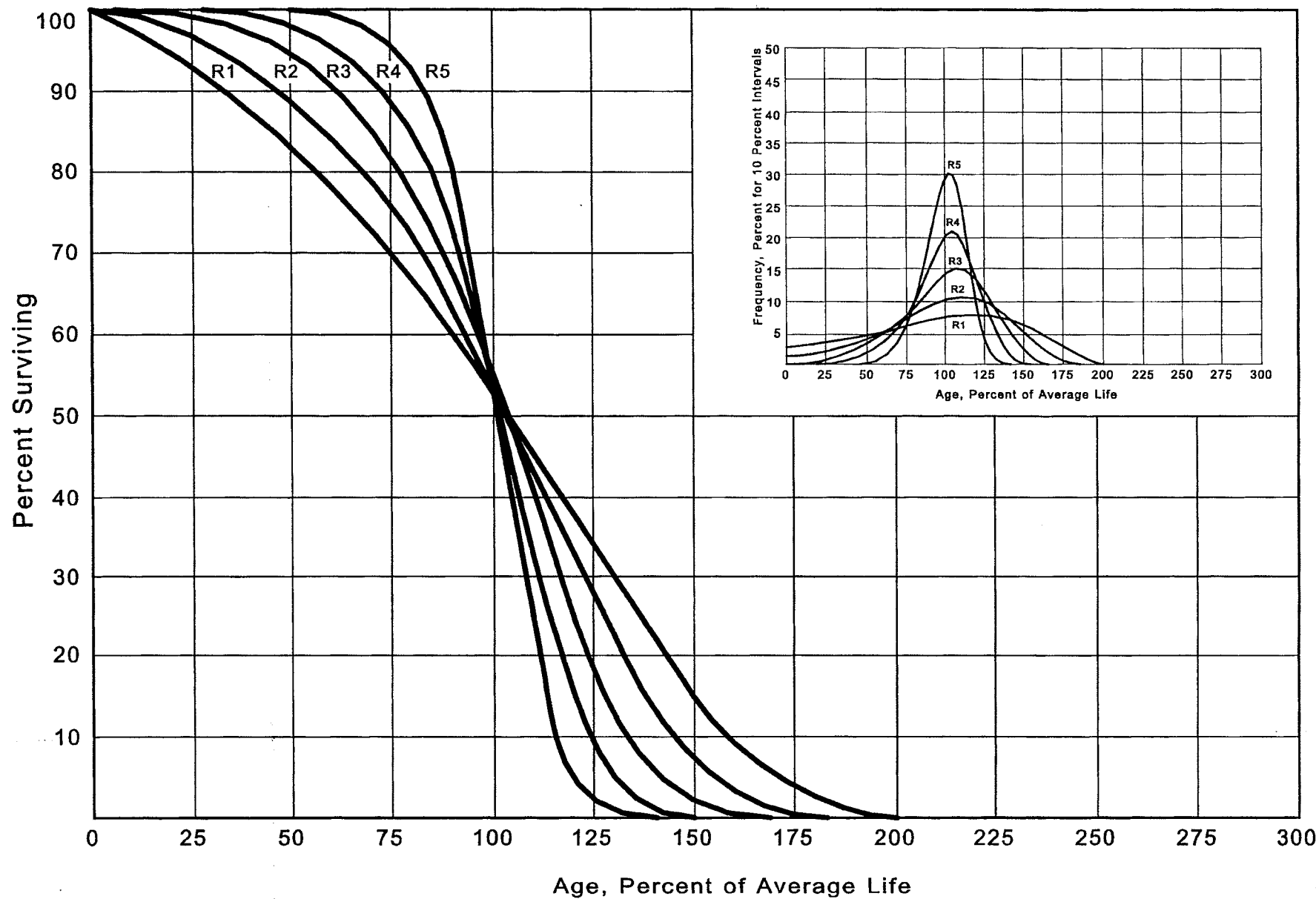


Figure 4. Right Modal or "R" Iowa Type Survivor Curves

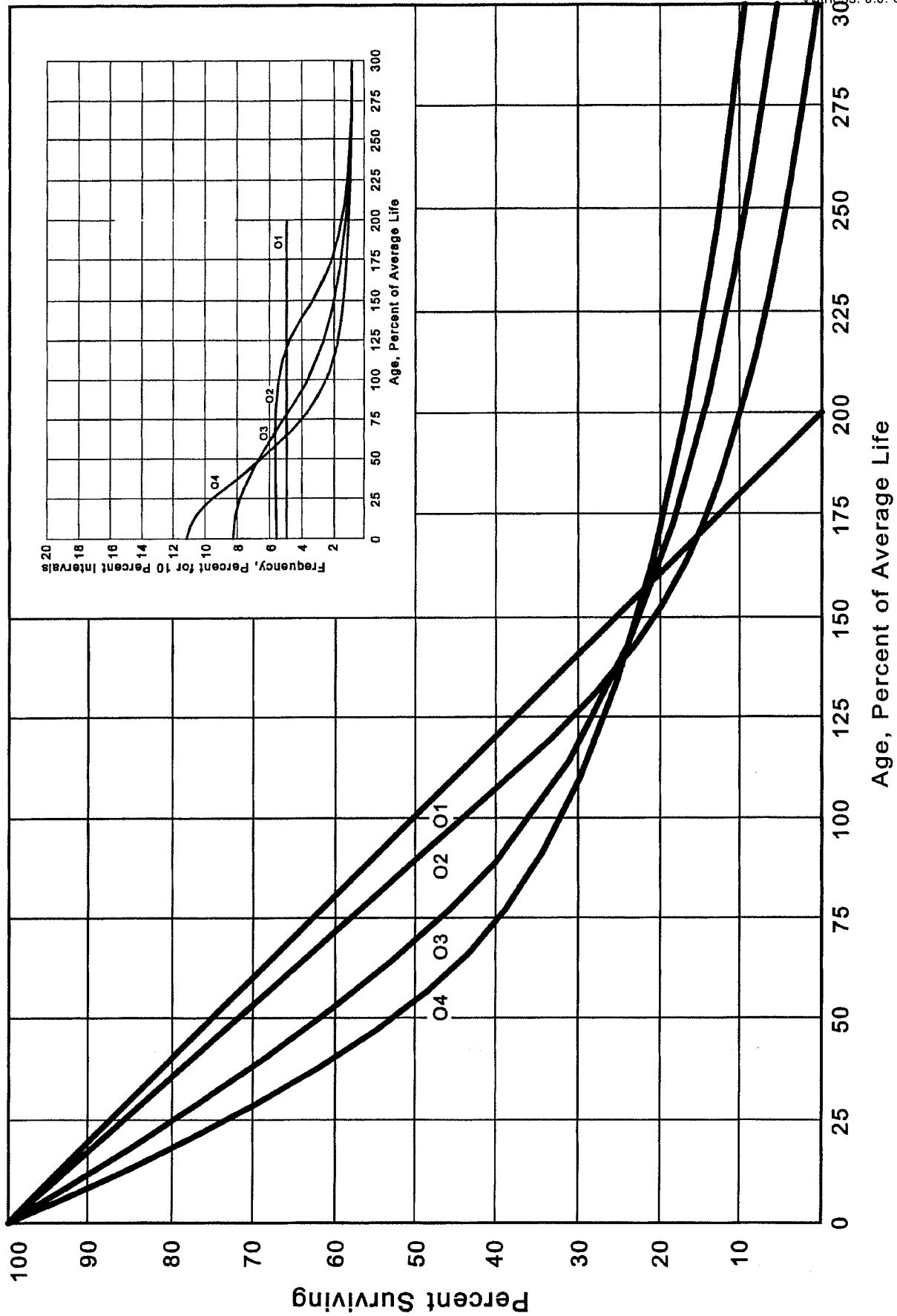


Figure 5. Origin Modal or "O" Iowa Type Survivor Curves



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

---

<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 2008-2017 during which there were placements during the years 2003-2017. 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

---

<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 2003 were retired in 2008. 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 2008 retirements of 2003 installations and ending with the 2017 retirements of the 2012 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 2008-2017  
SUMMARIZED BY AGE INTERVAL

Experience Band 2008-2017

Placement Band 2003-2017

| Year<br>Placed<br>(1) | Retirements, Thousands of Dollars |             |             |             |             |             |             |             |              |              | Total During<br>Age Interval<br>(12) | Age<br>Interval<br>(13) |
|-----------------------|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------------------------------|-------------------------|
|                       | 2008<br>(2)                       | 2009<br>(3) | 2010<br>(4) | 2011<br>(5) | 2012<br>(6) | 2013<br>(7) | 2014<br>(8) | 2015<br>(9) | 2016<br>(10) | 2017<br>(11) |                                      |                         |
| 2003                  | 10                                | 11          | 12          | 13          | 14          | 16          | 23          | 24          | 25           | 26           | 26                                   | 13½-14½                 |
| 2004                  | 11                                | 12          | 13          | 15          | 16          | 18          | 20          | 21          | 22           | 19           | 44                                   | 12½-13½                 |
| 2005                  | 11                                | 12          | 13          | 14          | 16          | 17          | 19          | 21          | 22           | 18           | 64                                   | 11½-12½                 |
| 2006                  | 8                                 | 9           | 10          | 11          | 11          | 13          | 14          | 15          | 16           | 17           | 83                                   | 10½-11½                 |
| 2007                  | 9                                 | 10          | 11          | 12          | 13          | 14          | 16          | 17          | 19           | 20           | 93                                   | 9½-10½                  |
| 2008                  | 4                                 | 9           | 10          | 11          | 12          | 13          | 14          | 15          | 16           | 20           | 105                                  | 8½-9½                   |
| 2009                  |                                   | 5           | 11          | 12          | 13          | 14          | 15          | 16          | 18           | 20           | 113                                  | 7½-8½                   |
| 2010                  |                                   |             | 6           | 12          | 13          | 15          | 16          | 17          | 19           | 19           | 124                                  | 6½-7½                   |
| 2011                  |                                   |             |             | 6           | 13          | 15          | 16          | 17          | 19           | 19           | 131                                  | 5½-6½                   |
| 2012                  |                                   |             |             |             | 7           | 14          | 16          | 17          | 19           | 20           | 143                                  | 4½-5½                   |
| 2013                  |                                   |             |             |             |             | 8           | 18          | 20          | 22           | 23           | 146                                  | 3½-4½                   |
| 2014                  |                                   |             |             |             |             |             | 9           | 20          | 22           | 25           | 150                                  | 2½-3½                   |
| 2015                  |                                   |             |             |             |             |             |             | 11          | 23           | 25           | 151                                  | 1½-2½                   |
| 2016                  |                                   |             |             |             |             |             |             |             | 11           | 24           | 153                                  | ½-1½                    |
| 2017                  |                                   |             |             |             |             |             |             |             |              | 13           | 80                                   | 0-½                     |
| Total                 | 53                                | 68          | 86          | 106         | 128         | 157         | 196         | 231         | 273          | 308          | 1,606                                |                         |



SCHEDULE 2. OTHER TRANSACTIONS FOR EACH YEAR 2008-2017  
SUMMARIZED BY AGE INTERVAL

Experience Band 2008-2017

Placement Band 2003-2017

| Acquisitions, Transfers and Sales, Thousands of Dollars |             |      |      |      |      |      |                 |                   |                 |                    |                              |                 |
|---------------------------------------------------------|-------------|------|------|------|------|------|-----------------|-------------------|-----------------|--------------------|------------------------------|-----------------|
| Year<br>Placed                                          | During Year |      |      |      |      |      |                 |                   |                 |                    | Total During<br>Age Interval | Age<br>Interval |
|                                                         | 2008        | 2009 | 2010 | 2011 | 2012 | 2013 | 2014            | 2015              | 2016            | 2017               |                              |                 |
| (1)                                                     | (2)         | (3)  | (4)  | (5)  | (6)  | (7)  | (8)             | (9)               | (10)            | (11)               | (12)                         | (13)            |
| 2003                                                    | -           | -    | -    | -    | -    | -    | 60 <sup>a</sup> | -                 | -               | -                  | -                            | 13½-14½         |
| 2004                                                    | -           | -    | -    | -    | -    | -    | -               | -                 | -               | -                  | -                            | 12½-13½         |
| 2005                                                    | -           | -    | -    | -    | -    | -    | -               | -                 | -               | -                  | -                            | 11½-12½         |
| 2006                                                    | -           | -    | -    | -    | -    | -    | -               | (5) <sup>b</sup>  | -               | -                  | 60                           | 10½-11½         |
| 2007                                                    | -           | -    | -    | -    | -    | -    | -               | 6 <sup>a</sup>    | -               | -                  | -                            | 9½-10½          |
| 2008                                                    | -           | -    | -    | -    | -    | -    | -               | -                 | -               | -                  | (5)                          | 8½-9½           |
| 2009                                                    | -           | -    | -    | -    | -    | -    | -               | -                 | -               | -                  | 6                            | 7½-8½           |
| 2010                                                    | -           | -    | -    | -    | -    | -    | -               | -                 | -               | -                  | -                            | 6½-7½           |
| 2011                                                    | -           | -    | -    | -    | -    | -    | -               | (12) <sup>b</sup> | -               | -                  | -                            | 5½-6½           |
| 2012                                                    | -           | -    | -    | -    | -    | -    | -               | -                 | 22 <sup>a</sup> | -                  | -                            | 4½-5½           |
| 2013                                                    | -           | -    | -    | -    | -    | -    | -               | (19) <sup>b</sup> | -               | -                  | 10                           | 3½-4½           |
| 2014                                                    | -           | -    | -    | -    | -    | -    | -               | -                 | -               | -                  | -                            | 2½-3½           |
| 2015                                                    | -           | -    | -    | -    | -    | -    | -               | -                 | -               | (102) <sup>c</sup> | (121)                        | 1½-2½           |
| 2016                                                    | -           | -    | -    | -    | -    | -    | -               | -                 | -               | -                  | -                            | ½-1½            |
| 2017                                                    | -           | -    | -    | -    | -    | -    | -               | -                 | -               | -                  | -                            | 0-½             |
| Total                                                   | -           | -    | -    | -    | -    | -    | 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 2008 through 2017 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 2013 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 2008-2017 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 2008-2017  
SUMMARIZED BY AGE INTERVAL**

Experience Band 2008-2017

Placement Band 2003-2017

| Year<br>Placed | Exposures, Thousands of Dollars<br>Annual Survivors at the Beginning of the Year |                  |                  |                  |                  |                  |                  |                  |                    |                    | Total at<br>Beginning of<br>Age Interval | Age<br>Interval |
|----------------|----------------------------------------------------------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|--------------------|--------------------|------------------------------------------|-----------------|
|                | 2008                                                                             | 2009             | 2010             | 2011             | 2012             | 2013             | 2014             | 2015             | 2016               | 2017               | (12)                                     | (13)            |
| (1)            | (2)                                                                              | (3)              | (4)              | (5)              | (6)              | (7)              | (8)              | (9)              | (10)               | (11)               |                                          |                 |
| 2003           | 255                                                                              | 245              | 234              | 222              | 209              | 195              | 239              | 216              | 192                | 167                | 167                                      | 13½-14½         |
| 2004           | 279                                                                              | 268              | 256              | 243              | 228              | 212              | 194              | 174              | 153                | 131                | 323                                      | 12½-13½         |
| 2005           | 307                                                                              | 296              | 284              | 271              | 257              | 241              | 224              | 205              | 184                | 162                | 531                                      | 11½-12½         |
| 2006           | 338                                                                              | 330              | 321              | 311              | 300              | 289              | 276              | 262              | 242                | 226                | 823                                      | 10½-11½         |
| 2007           | 376                                                                              | 367              | 357              | 346              | 334              | 321              | 307              | 297              | 280                | 261                | 1,097                                    | 9½-10½          |
| 2008           | 420 <sup>a</sup>                                                                 | 416              | 407              | 397              | 386              | 374              | 361              | 347              | 332                | 316                | 1,503                                    | 8½-9½           |
| 2009           |                                                                                  | 460 <sup>a</sup> | 455              | 444              | 432              | 419              | 405              | 390              | 374                | 356                | 1,952                                    | 7½-8½           |
| 2010           |                                                                                  |                  | 510 <sup>a</sup> | 504              | 492              | 479              | 464              | 448              | 431                | 412                | 2,463                                    | 6½-7½           |
| 2011           |                                                                                  |                  |                  | 580 <sup>a</sup> | 574              | 561              | 546              | 530              | 501                | 482                | 3,057                                    | 5½-6½           |
| 2012           |                                                                                  |                  |                  |                  | 660 <sup>a</sup> | 653              | 639              | 623              | 628                | 609                | 3,789                                    | 4½-5½           |
| 2013           |                                                                                  |                  |                  |                  |                  | 750 <sup>a</sup> | 742              | 724              | 685                | 663                | 4,332                                    | 3½-4½           |
| 2014           |                                                                                  |                  |                  |                  |                  |                  | 850 <sup>a</sup> | 841              | 821                | 799                | 4,955                                    | 2½-3½           |
| 2015           |                                                                                  |                  |                  |                  |                  |                  |                  | 960 <sup>a</sup> | 949                | 926                | 5,719                                    | 1½-2½           |
| 2016           |                                                                                  |                  |                  |                  |                  |                  |                  |                  | 1,080 <sup>a</sup> | 1,069              | 6,579                                    | ½-1½            |
| 2017           |                                                                                  |                  |                  |                  |                  |                  |                  |                  |                    | 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>                            |                 |

<sup>a</sup>Additions during the year

shown as the total exposures at the beginning of age interval 4½-5½, is obtained by summing:

$$255 + 268 + 284 + 311 + 334 + 374 + 405 + 448 + 501 + 609.$$

### **Original Life Table**

The original life table, illustrated in Schedule 4 on page II-17, is developed from the totals shown on the schedules of retirements and exposures, Schedules 1 and 3, respectively. The exposures at the beginning of the age interval are obtained from the corresponding age interval of the exposure schedule, and the retirements during the age interval are obtained from the corresponding age interval of the retirement schedule. The retirement ratio is the result of dividing the retirements during the age interval by the exposures at the beginning of the age interval. The percent surviving at the beginning of each age interval is derived from survivor ratios, each of which equals one minus the retirement ratio. The percent surviving is developed by starting with 100% at age zero and successively multiplying the percent surviving at the beginning of each interval by the survivor ratio, i.e., one minus the retirement ratio for that age interval.

The calculations necessary to determine the percent surviving at age 5½ are as follows:

|                               |   |                                   |
|-------------------------------|---|-----------------------------------|
| Percent surviving at age 4½   | = | 88.15                             |
| Exposures at age 4½           | = | 3,789,000                         |
| Retirements from age 4½ to 5½ | = | 143,000                           |
| Retirement Ratio              | = | $143,000 \div 3,789,000 = 0.0377$ |
| Survivor Ratio                | = | $1.000 - 0.0377 = 0.9623$         |
| Percent surviving at age 5½   | = | $(88.15) \times (0.9623) = 84.83$ |



**SCHEDULE 4. ORIGINAL LIFE TABLE  
CALCULATED BY THE RETIREMENT RATE METHOD**

Experience Band 2008-2017

Placement Band 2003-2017

(Exposure and Retirement Amounts are in Thousands of Dollars)

| Age at<br>Beginning of<br>Interval<br>(1) | Exposures at<br>Beginning of<br>Age Interval<br>(2) | Retirements<br>During Age<br>Interval<br>(3) | Retirement<br>Ratio<br>(4) | Survivor<br>Ratio<br>(5) | Percent<br>Surviving at<br>Beginning of<br>Age Interval<br>(6) |
|-------------------------------------------|-----------------------------------------------------|----------------------------------------------|----------------------------|--------------------------|----------------------------------------------------------------|
| 0.0                                       | 7,490                                               | 80                                           | 0.0107                     | 0.9893                   | 100.00                                                         |
| 0.5                                       | 6,579                                               | 153                                          | 0.0233                     | 0.9767                   | 98.93                                                          |
| 1.5                                       | 5,719                                               | 151                                          | 0.0264                     | 0.9736                   | 96.62                                                          |
| 2.5                                       | 4,955                                               | 150                                          | 0.0303                     | 0.9697                   | 94.07                                                          |
| 3.5                                       | 4,332                                               | 146                                          | 0.0337                     | 0.9663                   | 91.22                                                          |
| 4.5                                       | 3,789                                               | 143                                          | 0.0377                     | 0.9623                   | 88.15                                                          |
| 5.5                                       | 3,057                                               | 131                                          | 0.0429                     | 0.9571                   | 84.83                                                          |
| 6.5                                       | 2,463                                               | 124                                          | 0.0503                     | 0.9497                   | 81.19                                                          |
| 7.5                                       | 1,952                                               | 113                                          | 0.0579                     | 0.9421                   | 77.11                                                          |
| 8.5                                       | 1,503                                               | 105                                          | 0.0699                     | 0.9301                   | 72.65                                                          |
| 9.5                                       | 1,097                                               | 93                                           | 0.0848                     | 0.9152                   | 67.57                                                          |
| 10.5                                      | 823                                                 | 83                                           | 0.1009                     | 0.8991                   | 61.84                                                          |
| 11.5                                      | 531                                                 | 64                                           | 0.1205                     | 0.8795                   | 55.60                                                          |
| 12.5                                      | 323                                                 | 44                                           | 0.1362                     | 0.8638                   | 48.90                                                          |
| 13.5                                      | 167                                                 | 26                                           | 0.1557                     | 0.8443                   | 42.24                                                          |
| 14.5                                      |                                                     |                                              |                            |                          | 35.66                                                          |
| Total                                     | <u>44,780</u>                                       | <u>1,606</u>                                 |                            |                          |                                                                |

Column 2 from Schedule 3, Column 12, Plant Exposed to Retirement.

Column 3 from Schedule 1, Column 12, Retirements for Each Year.

Column 4 = Column 3 divided by Column 2.

Column 5 = 1.0000 minus Column 4.

Column 6 = Column 5 multiplied by Column 6 as of the Preceding Age Interval.

The totals of the exposures and retirements (Columns 2 and 3) are shown for the purpose of checking with the respective totals in Schedules 1 and 3. The ratio of the total retirements to the total exposures, other than for each age interval, is meaningless.

The original survivor curve is plotted from the original life table (Column 6, Schedule 4). When the curve terminates at a percent surviving greater than zero, it is called a stub survivor curve. Survivor curves developed from retirement rate studies generally are stub curves.

### **Smoothing the Original Survivor Curve**

The smoothing of the original survivor curve eliminates any irregularities and serves as the basis for the preliminary extrapolation to zero percent surviving of the original stub curve. Even if the original survivor curve is complete from 100% to zero percent, it is desirable to eliminate any irregularities, as there is still an extrapolation for the vintages which have not yet lived to the age at which the curve reaches zero percent. In this study, the smoothing of the original curve with established type curves was used to eliminate irregularities in the original curve.

The Iowa type curves are used in this study to smooth those original stub curves which are expressed as percents surviving at ages in years. Each original survivor curve was compared to the Iowa curves using visual and mathematical matching in order to determine the better fitting smooth curves. In Figures 6, 7, and 8, the original curve developed in Schedule 4 is compared with the L, S, and R Iowa type curves which most nearly fit the original survivor curve. In Figure 6, the L1 curve with an average life between 12 and 13 years appears to be the best fit. In Figure 7, the SO type curve with a 12-year average life appears to be the best fit and appears to be better than the L1 fitting. In Figure 8, the R1 type curve with a 12-year average life

appears to be the best fit and appears to be better than either the L1 or the SO. In Figure 9, the three fittings, 12-L1, 12-SO, and 12-R1 are drawn for comparison purposes. It is probable that the 12-R1 Iowa curve would be selected as the most representative of the plotted survivor characteristics of the group, assuming no contrary relevant factors external to the analysis of historical data.

FIGURE 6. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN L1 IOWA TYPE CURVE  
ORIGINAL AND SMOOTH SURVIVOR CURVES

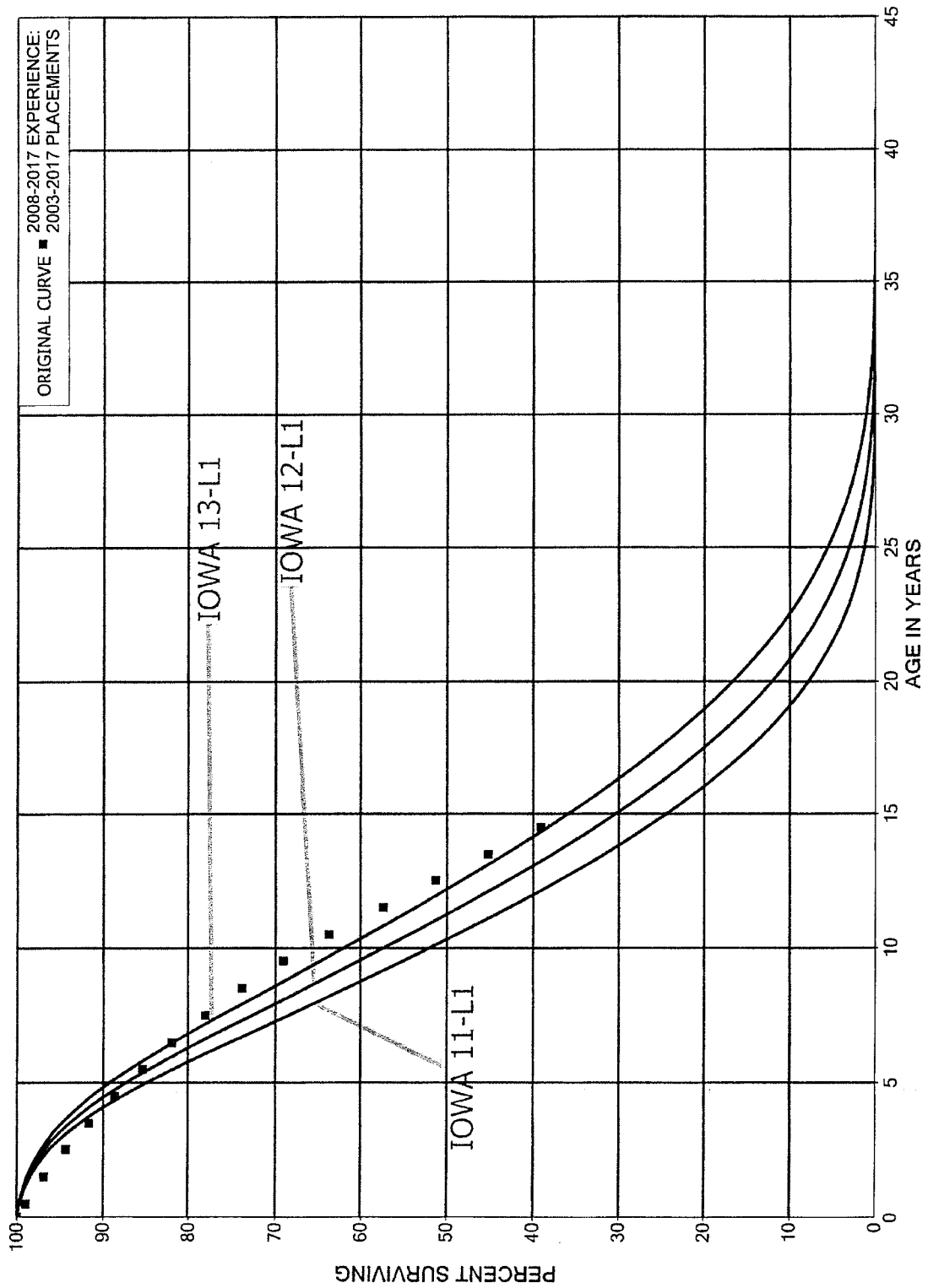


FIGURE 7. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN S0 IOWA TYPE CURVE  
ORIGINAL AND SMOOTH SURVIVOR CURVES

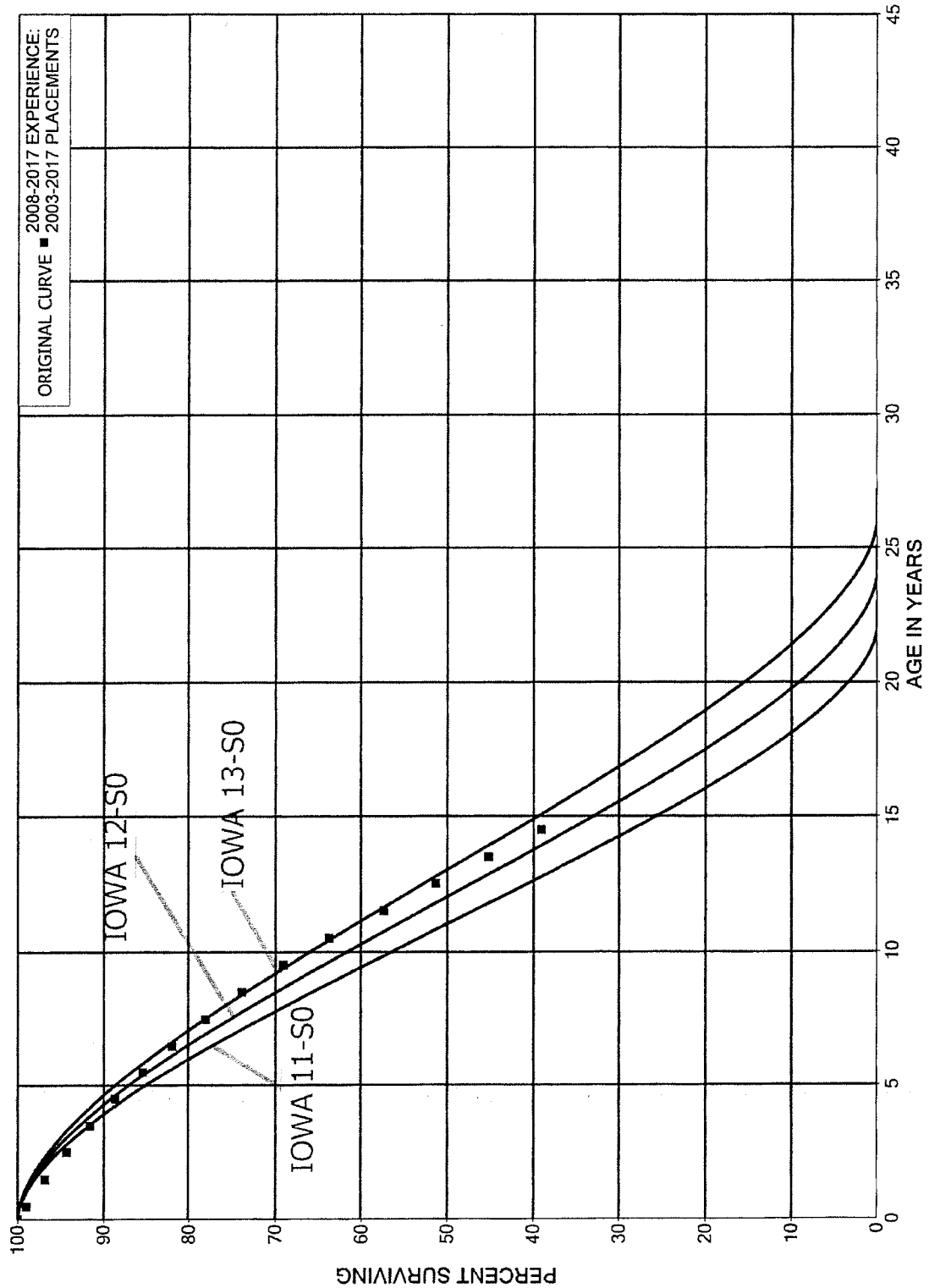


FIGURE 8. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN R1 IOWA TYPE CURVE  
ORIGINAL AND SMOOTH SURVIVOR CURVES

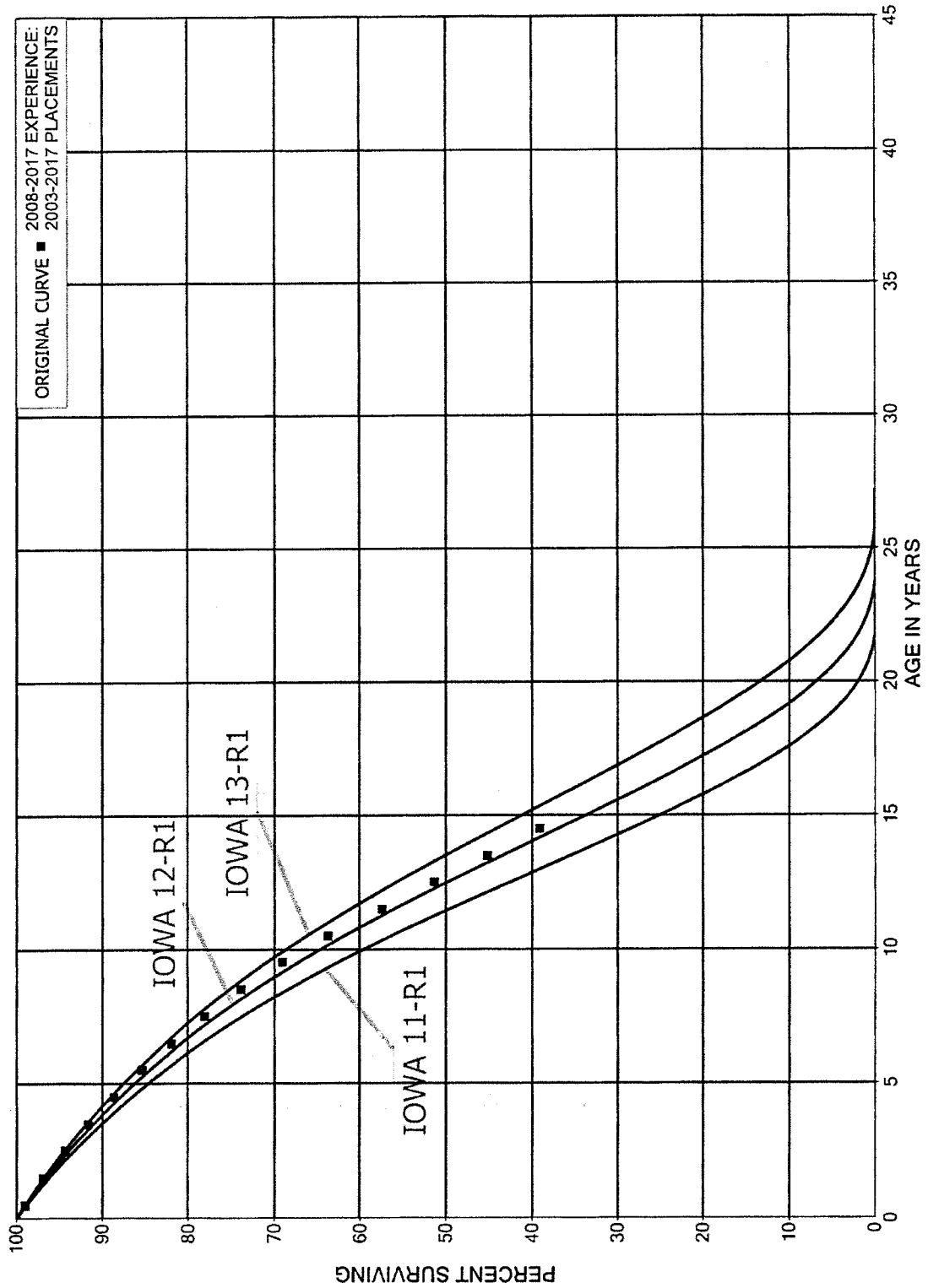
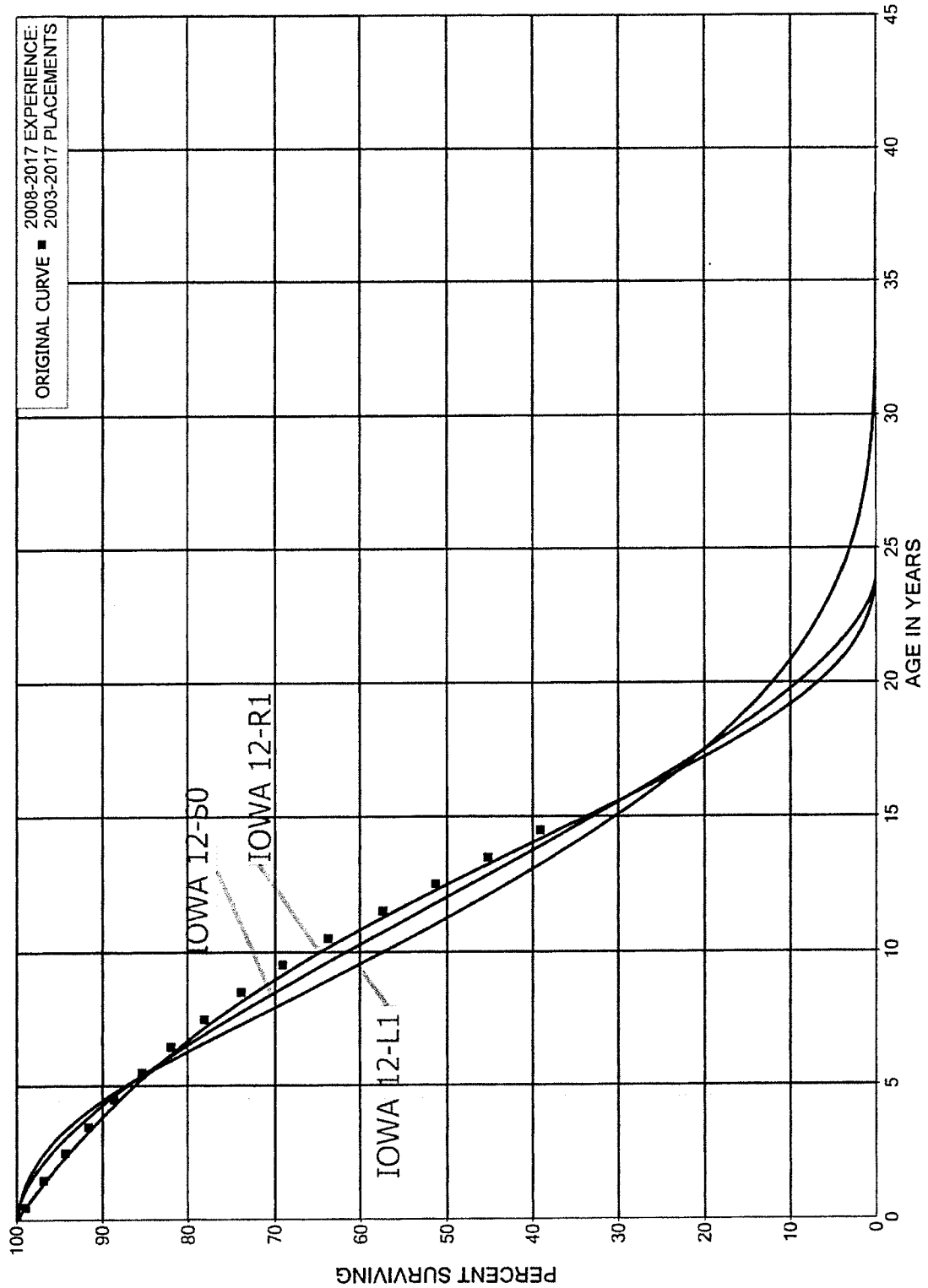


FIGURE 9. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN L1, S0 AND R1 IOWA TYPE CURVE  
ORIGINAL AND SMOOTH SURVIVOR CURVES



---

## PART III. SERVICE LIFE CONSIDERATIONS



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

#### **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.

#### **June 27, 2017**

- Monaca Operations Center
- Center Grange POD
- Anchor Hocking (Oneida)
- Apple Alley District Regulator Station
- Dravo District Regulator Station
- New York Avenue District Regulator Station
- Southpointe District Regulator Station
- Peoples Exchange Meter Set
- Tannehill Regulator Station

#### **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  
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:

- 374.4 Land Rights
- 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
- 379.1 Measuring and Regulating Equipment – City Gate
- 380 Services
- 381 Meters
- 382 Meter Installations
- 383 House Regulators
- 384 House Regulator Installations
- 385 Industrial Measuring and Regulating
  - Equipment - Other Than Meters
- 387 Other Equipment
  - General
  - Customer Information Services
- 390 Structures and Improvements - Communication
- 396 Power Operated Equipment
- 397 Communication Equipment - Telemetry

The combined analyses for Account 376.1, Mains – Cast iron, Account 376.3, Mains – Bare Steel and Account 376.45, Mains – Other, 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 2016. 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 in page VI-50 and the life tables for the two experience bands plotted on the chart follow it.

The survivor curve estimate for the experience bands 1939-2016 and 1977-2016, were the basis for the statistical indications. The Iowa 71-R1 survivor curve reasonably

represents the first 110 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 60.

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 71-R1 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, 1939-2016, and two shorter experience bands, 1970-2016 and 1997-2016. As the survivor curve chart illustrates, the 50-R0.5 survivor curve 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 70.

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 V-4.

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 6 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-R1.5 interim survivor curve was judged appropriate for the major structures based on the 1975-2016 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 55 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 1970-2016. 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.

---

## **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, 2018, 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:

$$Ratio = 1 - \frac{Average\ Remaining\ Life\ Expectancy}{Average\ Service\ Life}.$$

### 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, 2018 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... 11-30-2018  
SURVIVOR CURVE.... 12-S1.5

| AGE INTERVAL |        | RETIREMENTS DURING |           | GROUP ANNUAL  | YEAR | SUMMATION     | AVERAGE   | ANNUAL | ACCRUED |
|--------------|--------|--------------------|-----------|---------------|------|---------------|-----------|--------|---------|
| BEG          | END    | LIFE               | INTERVAL  | ACCUAL        | INST | OF ANNUAL     | PERCENT   | FACTOR | FACTOR  |
| (1)          | (2)    | (3)                | (4)       | (5)=(4)/(3)   | (6)  | ACCUALS       | SURVIVING | (9)    | (10)    |
| 0.000        | 0.917  | 0.458              | 0.03874   | 0.03874000000 | 2018 | 9.60407092849 | 95.820491 | 0.1002 | 0.0459  |
| 0.917        | 1.917  | 1.417              | 0.26936   | 0.19009174312 | 2017 | 9.88964194524 | 99.826578 | 0.0991 | 0.1404  |
| 1.917        | 2.917  | 2.417              | 0.71693   | 0.29661977658 | 2016 | 9.64628618539 | 99.333431 | 0.0971 | 0.2347  |
| 2.917        | 3.917  | 3.417              | 1.38010   | 0.40389230319 | 2015 | 9.29603014550 | 98.284918 | 0.0946 | 0.3232  |
| 3.917        | 4.917  | 4.417              | 2.24863   | 0.50908535205 | 2014 | 8.83954131788 | 96.470555 | 0.0916 | 0.4046  |
| 4.917        | 5.917  | 5.417              | 3.29149   | 0.60762230017 | 2013 | 8.28118749177 | 93.700494 | 0.0884 | 0.4789  |
| 5.917        | 6.917  | 6.417              | 4.43616   | 0.69131369799 | 2012 | 7.63171949269 | 89.836667 | 0.0850 | 0.5454  |
| 6.917        | 7.917  | 7.417              | 5.60035   | 0.75506943508 | 2011 | 6.90852792616 | 84.818413 | 0.0815 | 0.6045  |
| 7.917        | 8.917  | 8.417              | 6.69661   | 0.79560532256 | 2010 | 6.13319054734 | 78.669936 | 0.0780 | 0.6565  |
| 8.917        | 9.917  | 9.417              | 7.62294   | 0.80948709780 | 2009 | 5.33064433716 | 71.510159 | 0.0745 | 0.7016  |
| 9.917        | 10.917 | 10.417             | 8.30037   | 0.79681002208 | 2008 | 4.52749577722 | 63.548504 | 0.0712 | 0.7417  |
| 10.917       | 11.917 | 11.417             | 8.67209   | 0.75957694666 | 2007 | 3.74930229285 | 55.062277 | 0.0681 | 0.7775  |
| 11.917       | 12.917 | 12.417             | 8.70153   | 0.70077554965 | 2006 | 3.01912604469 | 46.375469 | 0.0651 | 0.8083  |
| 12.917       | 13.917 | 13.417             | 8.38597   | 0.62502571365 | 2005 | 2.35622541304 | 37.831719 | 0.0623 | 0.8359  |
| 13.917       | 14.917 | 14.417             | 7.75288   | 0.53775958937 | 2004 | 1.77483276153 | 29.762294 | 0.0596 | 0.8593  |
| 14.917       | 15.917 | 15.417             | 6.86360   | 0.44519686061 | 2003 | 1.28335453654 | 22.454052 | 0.0572 | 0.8819  |
| 15.917       | 16.917 | 16.417             | 5.79278   | 0.35285253091 | 2002 | 0.88432984078 | 16.125862 | 0.0548 | 0.8997  |
| 16.917       | 17.917 | 17.417             | 4.62848   | 0.26574496182 | 2001 | 0.57503109442 | 10.915231 | 0.0527 | 0.9179  |
| 17.917       | 18.917 | 18.417             | 3.47537   | 0.18870445784 | 2000 | 0.34780638459 | 6.863306  | 0.0507 | 0.9337  |
| 18.917       | 19.917 | 19.417             | 2.41377   | 0.12431220065 | 1999 | 0.19129805534 | 3.918734  | 0.0488 | 0.9475  |
| 19.917       | 20.917 | 20.417             | 1.50939   | 0.07392809913 | 1998 | 0.09217790545 | 1.957154  | 0.0471 | 0.9616  |
| 20.917       | 21.917 | 21.417             | 0.81149   | 0.03788999393 | 1997 | 0.03626885892 | 0.796715  | 0.0455 | 0.9745  |
| 21.917       | 22.917 | 22.417             | 0.32964   | 0.01470491145 | 1996 | 0.00997140623 | 0.226148  | 0.0441 | 0.9886  |
| 22.917       | 23.917 | 23.417             | 0.06124   | 0.00261519409 | 1995 | 0.00131135346 | 0.030708  | 0.0427 | 0.9999  |
| 23.917       | 24.000 | 23.959             | 0.00009   | 0.00000375642 | 1994 | 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 (2018), 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 2017 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 2018 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, 2018, the accrual for 2018 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 2018, equals the group annual accrual for 2018 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, 2018.

## **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<br/>Period,<br/>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                                        |
| 398, Miscellaneous Equipment             | 15                                        |

For the purpose of calculating annual amortization amounts as of November 30, 2018, 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, 2013 through November 30, 2017. The data for the last month of 2017 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 2013 through 2017 net salvage accrual.



---

## PART V. RESULTS OF STUDY

## **PART V. RESULTS OF STUDY**

### **DESCRIPTION OF SUMMARY TABULATIONS**

Tables 1 through 4 presented on pages V-4 through V-11 summarize the results of the depreciation study as of November 30, 2018. Table 1 sets forth, by depreciable group, the estimated survivor curve, original cost, book depreciation reserve as of November 30, 2018, 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, 2018. Table 3 sets forth the calculation of the depreciation accruals for the twelve months ended November 30, 2018. Table 4 presents the annual amortization of experienced and estimated net salvage based on the period 2013 through 2017.

### **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 2013-2017 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-2. The tabulations of experienced and estimated net salvage by

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. SUMMARY OF ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF NOVEMBER 30, 2018

| DEPRECIABLE GROUP               |                                     | SURVIVOR CURVE | ORIGINAL COST<br>AS OF<br>NOVEMBER 30, 2018 | BOOK<br>RESERVE | FUTURE<br>BOOK<br>ACCRUALS | CALCULATED<br>ANNUAL ACCRUAL |                     | COMPOSITE<br>REMAINING<br>LIFE |
|---------------------------------|-------------------------------------|----------------|---------------------------------------------|-----------------|----------------------------|------------------------------|---------------------|--------------------------------|
| (1)                             |                                     | (2)            | (3)                                         | (4)             | (5)                        | AMOUNT<br>(6)                | RATE<br>(7)=(6)/(3) | (8)=(5)/(6)                    |
| DEPRECIABLE PLANT               |                                     |                |                                             |                 |                            |                              |                     |                                |
| UNDERGROUND STORAGE PLANT       |                                     |                |                                             |                 |                            |                              |                     |                                |
| 350.2                           | RIGHTS OF WAY                       | SQUARE *       | 1,932.08                                    | 1,931           | 1                          | 0                            | -                   | -                              |
| 351                             | COMPRESSOR STATION STRUCTURES       | 65-R2.5 *      | 3,287,122.58                                | 1,569,157       | 1,717,966                  | 263,391                      | 8.01                | 6.5                            |
| WELLS                           |                                     |                |                                             |                 |                            |                              |                     |                                |
| 352.01                          | CONSTRUCTION                        | SQUARE *       | 799,133.73                                  | 799,118         | 16                         | 2                            | -                   | 8.0                            |
| 352.02                          | EQUIPMENT                           | 50-S2.5 *      | 168,679.67                                  | 168,680         | 0                          | 0                            | -                   | -                              |
| TOTAL ACCOUNT 352               |                                     |                | 967,813.40                                  | 967,798         | 16                         | 2                            |                     |                                |
| 352.1                           | STORAGE LEASEHOLDS AND RIGHTS       | SQUARE *       | 206,940.78                                  | 206,932         | 9                          | 1                            | -                   | 6.6                            |
| 353                             | LINES                               | 50-S1.5 *      | 399,542.52                                  | 399,543         | 0                          | 0                            | -                   | -                              |
| 354                             | COMPRESSOR STATION EQUIPMENT        | 55-R2.5 *      | 864,751.66                                  | 721,621         | 143,131                    | 22,027                       | 2.55                | 6.5                            |
| 355                             | MEASURING AND REGULATING EQUIPMENT  | 37-R1.5 *      | 104,476.92                                  | 104,477         | 0                          | 0                            | -                   | -                              |
| TOTAL UNDERGROUND STORAGE PLANT |                                     |                | 5,832,579.94                                | 3,971,459       | 1,861,123                  | 285,421                      | 4.89                |                                |
| DISTRIBUTION PLANT              |                                     |                |                                             |                 |                            |                              |                     |                                |
| LAND AND LAND RIGHTS            |                                     |                |                                             |                 |                            |                              |                     |                                |
| 374.4                           | LAND RIGHTS                         | 70-R2.5        | 2,882,928.38                                | 687,983         | 2,194,945                  | 48,393                       | 1.68                | 45.4                           |
| 374.5                           | RIGHTS OF WAY                       | 80-S4          | 3,239,641.11                                | 1,682,111       | 1,557,530                  | 35,486                       | 1.10                | 43.9                           |
| TOTAL ACCOUNT 374               |                                     |                | 6,122,569.49                                | 2,370,094       | 3,752,475                  | 83,879                       | 1.37                |                                |
| STRUCTURES AND IMPROVEMENTS     |                                     |                |                                             |                 |                            |                              |                     |                                |
| 375.34                          | MEASURING AND REGULATING            | 60-R1          | 5,670,124.39                                | 1,248,218       | 4,421,906                  | 130,413                      | 2.30                | 33.9                           |
| 375.6                           | INDUSTRIAL MEASURING AND REGULATING | 55-R1          | 87,669.84                                   | 75,358          | 12,312                     | 561                          | 0.64                | 21.9                           |
| 375.7                           | OTHER DISTRIBUTION SYSTEMS          |                |                                             |                 |                            |                              |                     |                                |
|                                 | DISTRIBUTION SYSTEM STRUCTURES      | 90-R1.5 *      | 5,582,021.55                                | 2,033,263       | 3,548,758                  | 169,805                      | 3.04                | 20.9                           |
|                                 | OTHER BUILDINGS                     | 35-R2          | 3,039,561.24                                | 845,386         | 2,194,175                  | 95,590                       | 3.14                | 23.0                           |
| TOTAL ACCOUNT 375.7             |                                     |                | 8,621,582.79                                | 2,878,649       | 5,742,933                  | 265,395                      | 3.08                | 21.6                           |
| 375.8                           | COMMUNICATION                       | 45-R3          | 16,515.17                                   | 7,198           | 9,317                      | 371                          | 2.25                | 25.1                           |
| TOTAL ACCOUNT 375               |                                     |                | 14,395,892.19                               | 4,209,423       | 10,186,468                 | 396,740                      | 2.76                |                                |
| 376                             | MAINS                               |                |                                             |                 |                            |                              |                     |                                |
|                                 | CAST IRON                           | 71-R1 *        | 343,949.20                                  | 303,432         | 40,517                     | 6,409                        | 1.86                | 6.3                            |
|                                 | BARE STEEL                          | 71-R1 *        | 59,509,949.96                               | 55,523,356      | 3,986,594                  | 359,478                      | 0.60                | 11.1                           |
|                                 | OTHER                               | 71-R1          | 1,528,432,141.86                            | 176,305,558     | 1,352,126,584              | 33,548,738                   | 2.19                | 40.3                           |
| TOTAL ACCOUNT 376               |                                     |                | 1,588,286,041.02                            | 232,132,346     | 1,356,153,695              | 33,914,625                   | 2.14                |                                |



## COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF NOVEMBER 30, 2018

| DEPRECIABLE GROUP |                                                                   | SURVIVOR | ORIGINAL COST     | BOOK        | FUTURE        | CALCULATED     |             | COMPOSITE   |
|-------------------|-------------------------------------------------------------------|----------|-------------------|-------------|---------------|----------------|-------------|-------------|
|                   |                                                                   | CURVE    | AS OF             | RESERVE     | BOOK          | ANNUAL ACCRUAL |             | REMAINING   |
| (1)               |                                                                   | (2)      | NOVEMBER 30, 2018 | (4)         | ACCRUALS      | AMOUNT         | RATE        | LIFE        |
|                   |                                                                   |          | (3)               |             | (5)           | (6)            | (7)=(6)/(3) | (8)=(5)/(6) |
| 378               | MEASURING AND REGULATING EQUIPMENT - GENERAL                      | 45-O1    | 80,847,166.76     | 9,954,585   | 70,892,582    | 3,545,089      | 4.38        | 20.0        |
| 379.1             | MEASURING AND REGULATING EQUIPMENT - CITY GATE                    | 35-S2    | 140,227.51        | 100,009     | 40,219        | 3,790          | 2.70        | 10.6        |
| 380               | SERVICES                                                          |          |                   |             |               |                |             |             |
|                   | BARE STEEL                                                        | 50-R0.5  | 750,358.11        | 607,028     | 143,330       | 16,195         | 2.16        | 8.9         |
|                   | OTHER                                                             | 50-R0.5  | 530,624,172.45    | 123,213,443 | 407,410,729   | 15,411,057     | 2.90        | 26.4        |
|                   | TOTAL ACCOUNT 380                                                 |          | 531,374,530.56    | 123,820,471 | 407,554,059   | 15,427,252     | 2.90        |             |
| 381               | METERS                                                            | 44-S1    | 38,642,926.60     | 16,573,233  | 22,069,694    | 920,673        | 2.38        | 24.0        |
| 381.1             | METERS - AMR                                                      | 15-S2.5  | 24,110,646.03     | 12,001,395  | 12,109,251    | 1,682,187      | 6.98        | 7.2         |
| 382               | METER INSTALLATIONS                                               | 55-R3    | 40,392,815.54     | 12,964,052  | 27,428,764    | 766,598        | 1.90        | 35.8        |
| 383               | HOUSE REGULATORS                                                  | 45-S2    | 12,601,762.36     | 4,091,972   | 8,509,790     | 279,384        | 2.22        | 30.5        |
| 384               | HOUSE REGULATOR INSTALLATIONS                                     | 45-S2    | 3,864,772.07      | 3,071,294   | 793,478       | 38,049         | 0.98        | 20.9        |
| 385               | INDUSTRIAL MEASURING AND REGULATING EQUIPMENT - OTHER THAN METERS | 30-R0.5  | 8,162,002.27      | 2,818,868   | 5,343,134     | 389,224        | 4.77        | 13.7        |
|                   | OTHER EQUIPMENT                                                   |          |                   |             |               |                |             |             |
| 387               | GENERAL                                                           | 32-R0.5  | 136,698.14        | 79,693      | 57,005        | 3,421          | 2.50        | 16.7        |
| 387.4             | COMMUNICATION EQUIPMENT                                           | 25-R2    | 8,228,023.58      | 1,506,428   | 6,721,596     | 414,671        | 5.04        | 16.2        |
| 387.5             | GPS EQUIPMENT                                                     | 10-S3    | 2,053,366.00      | 773,743     | 1,279,623     | 254,398        | 12.39       | 5.0         |
|                   | TOTAL ACCOUNT 387                                                 |          | 10,418,087.72     | 2,359,864   | 8,058,224     | 672,490        | 6.46        |             |
|                   | TOTAL DISTRIBUTION PLANT                                          |          | 2,359,359,440.12  | 426,467,606 | 1,932,891,833 | 58,119,980     | 2.46        |             |
| GENERAL PLANT     |                                                                   |          |                   |             |               |                |             |             |
| 390.1             | STRUCTURES AND IMPROVEMENTS - COMMUNICATION                       | 45-R2    | 120,070.46        | 87,332      | 32,738        | 1,852          | 1.54        | 17.7        |
|                   | OFFICE FURNITURE AND EQUIPMENT                                    |          |                   |             |               |                |             |             |
| 391.1             | FURNITURE                                                         | 20-SQ    | 2,943,535.02      | 1,420,052   | 1,523,483     | 98,265         | 3.34        | 15.5        |
| 391.11            | EQUIPMENT                                                         | 15-SQ    | 91,303.67         | 29,040      | 62,264        | 5,905          | 6.47        | 10.5        |
| 391.12            | INFORMATION SYSTEMS                                               | 5-SQ     | 4,371,161.06      | 2,102,160   | 2,269,001     | 928,139        | 21.23       | 2.4         |
|                   | TOTAL ACCOUNT 391                                                 |          | 7,405,999.75      | 3,551,252   | 3,854,748     | 1,032,309      | 13.94       |             |
| 392               | TRANSPORTATION EQUIPMENT - TRAILERS                               | 15-SQ    | 59,454.85         | 38,313      | 21,142        | 6,491          | 10.92       | 3.3         |
| 393               | STORES EQUIPMENT                                                  | 20-SQ    | 13,435.25         | 13,435      | 0             | 0              | -           | -           |
|                   | TOOLS, SHOP AND GARAGE EQUIPMENT                                  |          |                   |             |               |                |             |             |
| 394               | EQUIPMENT                                                         | 25-SQ    | 16,851,173.80     | 6,682,101   | 10,169,073    | 616,460        | 3.66        | 16.5        |
| 394.12            | CNG FACILITIES                                                    | 12-S1.5  | 1,953,497.84      | 1,953,286   | 212           | 136            | 0.01        | 1.6         |
|                   | TOTAL ACCOUNT 394                                                 |          | 18,804,671.64     | 8,635,387   | 10,169,285    | 616,596        | 3.28        |             |



## COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK RESERVE AND  
CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF NOVEMBER 30, 2018

| DEPRECIABLE GROUP                 |                                        | SURVIVOR | ORIGINAL COST           | BOOK               | FUTURE               | CALCULATED        |             | COMPOSITE   |
|-----------------------------------|----------------------------------------|----------|-------------------------|--------------------|----------------------|-------------------|-------------|-------------|
|                                   |                                        | CURVE    | AS OF                   | RESERVE            | BOOK                 | ANNUAL ACCRUAL    |             | REMAINING   |
| (1)                               |                                        | (2)      | NOVEMBER 30, 2018       | (4)                | ACCRUALS             | AMOUNT            | RATE        | LIFE        |
|                                   |                                        |          | (3)                     |                    | (5)                  | (6)               | (7)=(6)/(3) | (8)=(5)/(6) |
| 395                               | LABORATORY EQUIPMENT                   | 20-SQ    | 273,740.05              | 51,471             | 222,269              | 14,032            | 5.13        | 15.8        |
| 396                               | POWER OPERATED EQUIPMENT               | 13-L2    | 1,036,104.04            | 1,022,613          | 13,491               | 2,702             | 0.26        | 5.0         |
| 397.5                             | COMMUNICATION EQUIPMENT - TELEMETERING | 19-R2.5  | 2,722,164.90            | 772,129            | 1,950,036            | 212,153           | 7.79        | 9.2         |
| 398                               | MISCELLANEOUS EQUIPMENT                | 15-SQ    | 1,228,215.67            | 330,994            | 897,222              | 82,770            | 6.74        | 10.8        |
| <b>TOTAL GENERAL PLANT</b>        |                                        |          | <b>31,663,856.61</b>    | <b>14,502,926</b>  | <b>17,160,931</b>    | <b>1,968,905</b>  | <b>6.22</b> |             |
| <b>SUBTOTAL DEPRECIABLE PLANT</b> |                                        |          | <b>2,396,855,876.67</b> | <b>444,941,991</b> | <b>1,951,913,887</b> | <b>60,374,306</b> | <b>2.52</b> |             |
| <b>AMORTIZABLE PLANT</b>          |                                        |          |                         |                    |                      |                   |             |             |
| 303                               | MISCELLANEOUS INTANGIBLE PLANT         |          | 33,925,351.78           | 12,805,243         | 21,120,109           | 3,350,293         | **          |             |
| 362.1                             | ENVIRONMENTAL REMEDIATION              |          |                         | (190,733)          |                      |                   |             |             |
| 374.2                             | LAND, OTHER DISTRIBUTION SYSTEMS       |          | 477,102.49              | 179,509            |                      |                   |             |             |
| 375.71                            | STRUCTURES AND IMPROVEMENTS - LEASED   |          | 4,087,034.78            | 1,149,715          | 2,937,320            | 217,731           | **          |             |
| <b>SUBTOTAL AMORTIZABLE PLANT</b> |                                        |          | <b>38,489,489.05</b>    | <b>13,943,734</b>  | <b>24,057,429</b>    | <b>3,568,024</b>  |             |             |
| <b>NONDEPRECIABLE PLANT</b>       |                                        |          | <b>172,413.08</b>       |                    |                      |                   |             |             |
| <b>TOTAL GAS PLANT</b>            |                                        |          | <b>2,435,517,778.80</b> | <b>458,885,725</b> | <b>1,975,971,316</b> | <b>63,942,330</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 NOVEMBER 30, 2018, OF THE BOOK RESERVE AS OF NOVEMBER 30, 2017

| ACCOUNT | BOOK RESERVE<br>AS OF<br>NOVEMBER 30, 2017 | DEPRECIATION<br>ACCRUALS | AMORTIZATION<br>OF<br>NET SALVAGE | PROJECTED<br>RETIREMENTS | PROJECTED<br>GROSS<br>SALVAGE | PROJECTED<br>COST OF<br>REMOVAL | ACQUISITIONS | ADJUSTMENTS | RESERVE AT<br>END OF<br>PERIOD | BOOK RESERVE AS<br>A PERCENT OF<br>ORIGINAL COST |
|---------|--------------------------------------------|--------------------------|-----------------------------------|--------------------------|-------------------------------|---------------------------------|--------------|-------------|--------------------------------|--------------------------------------------------|
| (1)     | (2)                                        | (3)                      | (4)                               | (5)                      | (6)                           | (7)                             | (8)          | (9)         | (10)                           | (11)                                             |
| 350.20  | 1,931                                      |                          |                                   |                          |                               |                                 |              |             | 1,931                          | 99.94                                            |
| 351.20  | 1,304,750                                  | 264,285                  | 122                               |                          |                               |                                 |              |             | 1,569,157                      | 47.74                                            |
| 352.01  | 799,118                                    |                          |                                   |                          |                               |                                 |              |             | 799,118                        | 100.00                                           |
| 352.02  | 168,680                                    |                          |                                   |                          |                               |                                 |              |             | 168,680                        | 100.00                                           |
| 352.10  | 206,932                                    |                          |                                   |                          |                               |                                 |              |             | 206,932                        | 100.00                                           |
| 353.00  | 399,543                                    |                          |                                   |                          |                               |                                 |              |             | 399,543                        | 100.00                                           |
| 354.00  | 699,570                                    | 22,051                   |                                   |                          |                               |                                 |              |             | 721,621                        | 83.45                                            |
| 355.00  | 104,477                                    |                          |                                   |                          |                               |                                 |              |             | 104,477                        | 100.00                                           |
| 374.40  | 667,725                                    | 46,092                   | 8,573                             | 22,706                   |                               | 11,701                          |              |             | 687,983                        | 23.86                                            |
| 374.50  | 1,643,493                                  | 35,636                   | 2,982                             |                          |                               |                                 |              |             | 1,682,111                      | 51.92                                            |
| 375.34  | 1,213,191                                  | 135,082                  | 20,940                            | 86,419                   |                               | 34,576                          |              |             | 1,248,218                      | 22.01                                            |
| 375.60  | 74,553                                     | 587                      | 218                               |                          |                               |                                 |              |             | 75,358                         | 85.96                                            |
| 375.70  | 2,716,996                                  | 224,679                  | 4,510                             | 67,536                   |                               |                                 |              |             | 2,878,649                      | 33.39                                            |
| 375.80  | 6,825                                      | 373                      |                                   |                          |                               |                                 |              |             | 7,198                          | 43.58                                            |
| 376.00  | 220,312,862                                | 31,906,688               | 1,056,697                         | 19,183,288               |                               | 1,960,614                       |              |             | 232,132,346                    | 14.62                                            |
| 378.00  | 10,073,380                                 | 2,772,015                | 159,808                           | 2,387,211                |                               | 663,407                         |              |             | 9,954,585                      | 12.31                                            |
| 379.10  | 95,966                                     | 4,025                    | 18                                |                          |                               |                                 |              |             | 100,009                        | 71.32                                            |
| 380.00  | 114,252,931                                | 14,721,344               | 2,873,649                         | 5,580,867                |                               | 2,446,586                       |              |             | 123,820,471                    | 23.30                                            |
| 381.00  | 15,801,176                                 | 920,037                  | (50,093)                          | 109,985                  | 12,098                        |                                 |              |             | 16,573,233                     | 42.89                                            |
| 381.10  | 10,261,568                                 | 1,739,827                |                                   |                          |                               |                                 |              |             | 12,001,395                     | 49.78                                            |
| 382.00  | 12,461,669                                 | 743,990                  |                                   | 241,607                  |                               |                                 |              |             | 12,964,052                     | 32.09                                            |
| 383.00  | 3,881,080                                  | 271,021                  |                                   | 60,129                   |                               |                                 |              |             | 4,091,972                      | 32.47                                            |
| 384.00  | 3,032,646                                  | 38,648                   |                                   |                          |                               |                                 |              |             | 3,071,294                      | 79.47                                            |
| 385.00  | 2,643,672                                  | 356,142                  | 62,585                            | 199,390                  |                               | 44,141                          |              |             | 2,818,868                      | 34.54                                            |
| 387.00  | 75,906                                     | 3,787                    |                                   |                          |                               |                                 |              |             | 79,693                         | 58.30                                            |
| 387.40  | 1,069,199                                  | 436,304                  | 925                               |                          |                               |                                 |              |             | 1,506,428                      | 18.31                                            |
| 387.50  | 514,814                                    | 258,929                  |                                   |                          |                               |                                 |              |             | 773,743                        | 37.68                                            |
| 390.10  | 85,423                                     | 1,909                    |                                   |                          |                               |                                 |              |             | 87,332                         | 72.73                                            |
| 391.10  | 1,662,145                                  | 92,390                   |                                   | 334,483                  |                               |                                 |              |             | 1,420,052                      | 48.24                                            |
| 391.11  | 23,133                                     | 5,907                    |                                   |                          |                               |                                 |              |             | 29,040                         | 31.81                                            |
| 391.12  | 1,348,842                                  | 753,318                  |                                   |                          |                               |                                 |              |             | 2,102,160                      | 48.09                                            |
| 392.00  | 88,926                                     | 577                      | (14,124)                          | 37,066                   |                               |                                 |              |             | 38,313                         | 64.44                                            |
| 393.00  | 13,435                                     |                          |                                   |                          |                               |                                 |              |             | 13,435                         | 100.00                                           |
| 394.00  | 6,087,689                                  | 594,602                  | 790                               | 980                      |                               |                                 |              |             | 6,682,101                      | 39.65                                            |
| 394.12  | 1,953,091                                  | 195                      |                                   |                          |                               |                                 |              |             | 1,953,286                      | 99.99                                            |
| 395.00  | 36,580                                     | 14,891                   |                                   |                          |                               |                                 |              |             | 51,471                         | 18.80                                            |
| 396.00  | 1,256,735                                  |                          | (53,304)                          | 180,818                  |                               |                                 |              |             | 1,022,613                      | 98.70                                            |
| 397.50  | 743,236                                    | 221,722                  | 5,928                             | 164,262                  |                               | 34,495                          |              |             | 772,129                        | 28.36                                            |
| 398.00  | 247,882                                    | 83,112                   |                                   |                          |                               |                                 |              |             | 330,994                        | 26.95                                            |
|         | 418,031,770                                | 56,670,165               | 4,080,224                         | 28,656,746               | 12,098                        | 5,195,520                       | 0            | 0           | 444,941,991                    |                                                  |



## COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 2. BRINGFORWARD TO NOVEMBER 30, 2018, OF THE BOOK RESERVE AS OF NOVEMBER 30, 2017

| ACCOUNT<br>(1)    | BOOK RESERVE<br>AS OF<br>NOVEMBER 30, 2017<br>(2) | + | DEPRECIATION<br>ACCRUALS<br>(3) | + | AMORTIZATION<br>OF<br>NET SALVAGE<br>(4) | - | PROJECTED<br>RETIREMENTS<br>(5) | + | PROJECTED<br>GROSS<br>SALVAGE<br>(6) | - | PROJECTED<br>COST OF<br>REMOVAL<br>(7) | + | ACQUISITIONS<br>(8) | - | ADJUSTMENTS<br>(9) | = | RESERVE AT<br>END OF<br>PERIOD<br>(10) | BOOK RESERVE AS<br>A PERCENT OF<br>ORIGINAL COST<br>(11) |
|-------------------|---------------------------------------------------|---|---------------------------------|---|------------------------------------------|---|---------------------------------|---|--------------------------------------|---|----------------------------------------|---|---------------------|---|--------------------|---|----------------------------------------|----------------------------------------------------------|
| AMORTIZABLE PLANT |                                                   |   |                                 |   |                                          |   |                                 |   |                                      |   |                                        |   |                     |   |                    |   |                                        |                                                          |
| 303.00            | 10,398,453                                        |   | 3,224,729                       |   |                                          |   | 817,939                         |   |                                      |   |                                        |   |                     |   |                    |   | 12,805,243                             | 37.75                                                    |
| 362.10            | (318,584)                                         |   |                                 |   | 127,851                                  |   |                                 |   |                                      |   |                                        |   |                     |   |                    |   | (190,733)                              |                                                          |
| 374.20            | 210,197                                           |   |                                 |   | (30,688)                                 |   |                                 |   |                                      |   |                                        |   |                     |   |                    |   | 179,509                                | 37.62                                                    |
| 375.71            | 1,099,938                                         |   | 179,544                         |   |                                          |   | 129,767                         |   |                                      |   |                                        |   |                     |   |                    |   | 1,149,715                              | 28.13                                                    |
|                   | 11,390,004                                        |   | 3,404,273                       |   | 97,163                                   |   | 947,706                         |   | 0                                    |   | 0                                      |   | 0                   |   | 0                  |   | 13,943,734                             |                                                          |
| TOTAL             | 429,421,774                                       |   | 60,074,438                      |   | 4,177,387                                |   | 29,604,452                      |   | 12,098                               |   | 5,195,520                              |   | 0                   |   | 0                  |   | 458,885,725                            |                                                          |



COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 3. CALCULATION OF DEPRECIATION ACCRUALS FOR THE TWELVE MONTHS ENDED NOVEMBER 30, 2018

| DEPRECIABLE GROUP<br>(1)           |                                                                   | ORIGINAL COST<br>AS OF<br>NOVEMBER 30, 2017<br>(2) | ORIGINAL COST<br>AS OF<br>NOVEMBER 30, 2018<br>(3) | COMPOSITE<br>ACCRUAL<br>RATE<br>(4) | ANNUAL<br>ACCRUAL<br>AMOUNT<br>(5) |
|------------------------------------|-------------------------------------------------------------------|----------------------------------------------------|----------------------------------------------------|-------------------------------------|------------------------------------|
| <b>DEPRECIABLE PLANT</b>           |                                                                   |                                                    |                                                    |                                     |                                    |
| <b>UNDERGROUND STORAGE PLANT</b>   |                                                                   |                                                    |                                                    |                                     |                                    |
| 350.2                              | RIGHTS-OF-WAY                                                     | 1,932                                              | 1,932                                              | -                                   | 0                                  |
| 351                                | COMPRESSOR STATION STRUCTURES                                     | 3,287,123                                          | 3,287,123                                          | 8.04                                | 264,285                            |
| <b>WELLS</b>                       |                                                                   |                                                    |                                                    |                                     |                                    |
| 352.01                             | CONSTRUCTION                                                      | 799,134                                            | 799,134                                            | -                                   | 0                                  |
| 352.02                             | EQUIPMENT                                                         | 168,680                                            | 168,680                                            | -                                   | 0                                  |
|                                    | <b>TOTAL ACCOUNT 352</b>                                          | <b>967,813</b>                                     | <b>967,813</b>                                     |                                     | <b>0</b>                           |
| 352.1                              | STORAGE LEASEHOLDS AND RIGHTS                                     | 206,941                                            | 206,941                                            | -                                   | 0                                  |
| 353                                | LINES                                                             | 399,543                                            | 399,543                                            | -                                   | 0                                  |
| 354                                | COMPRESSOR STATION EQUIPMENT                                      | 864,752                                            | 864,752                                            | 2.55                                | 22,051                             |
| 355                                | MEASURING AND REGULATING EQUIPMENT                                | 104,477                                            | 104,477                                            | -                                   | 0                                  |
|                                    | <b>TOTAL UNDERGROUND STORAGE PLANT</b>                            | <b>5,832,580</b>                                   | <b>5,832,580</b>                                   | <b>4.91</b>                         | <b>286,336</b>                     |
| <b>DISTRIBUTION PLANT</b>          |                                                                   |                                                    |                                                    |                                     |                                    |
| <b>LAND AND LAND RIGHTS</b>        |                                                                   |                                                    |                                                    |                                     |                                    |
| 374.4                              | LAND RIGHTS                                                       | 2,670,339                                          | 2,882,928                                          | 1.66                                | 46,092                             |
| 374.5                              | RIGHTS-OF-WAY                                                     | 3,239,641                                          | 3,239,641                                          | 1.10                                | 35,636                             |
|                                    | <b>TOTAL ACCOUNT 374</b>                                          | <b>5,909,980</b>                                   | <b>6,122,569</b>                                   | <b>1.35</b>                         | <b>81,728</b>                      |
| <b>STRUCTURES AND IMPROVEMENTS</b> |                                                                   |                                                    |                                                    |                                     |                                    |
| 375.34                             | MEASURING AND REGULATING                                          | 5,729,198                                          | 5,670,124                                          | 2.37                                | 135,082                            |
| 375.6                              | INDUSTRIAL MEASURING AND REGULATING                               | 87,670                                             | 87,670                                             | 0.67                                | 587                                |
| 375.7                              | OTHER DISTRIBUTION SYSTEMS                                        |                                                    |                                                    |                                     |                                    |
|                                    | DISTRIBUTION SYSTEM STRUCTURES                                    | 4,937,983                                          | 5,717,577                                          | 2.75                                | 146,514                            |
|                                    | OTHER BUILDINGS                                                   | 2,449,730                                          | 2,904,006                                          | 2.92                                | 78,165                             |
|                                    | <b>TOTAL ACCOUNT 375.70</b>                                       | <b>7,387,713</b>                                   | <b>8,621,583</b>                                   | <b>2.81</b>                         | <b>224,679</b>                     |
| 375.8                              | COMMUNICATION STRUCTURES                                          | 16,515                                             | 16,515                                             | 2.26                                | 373                                |
|                                    | <b>TOTAL ACCOUNT 375</b>                                          | <b>7,404,228</b>                                   | <b>8,638,098</b>                                   | <b>2.60</b>                         | <b>225,052</b>                     |
| 376                                | <b>MAINS</b>                                                      |                                                    |                                                    |                                     |                                    |
|                                    | CAST IRON                                                         | 401,656                                            | 343,949                                            | 1.52                                | 5,667                              |
|                                    | BARE STEEL                                                        | 66,940,944                                         | 59,509,950                                         | 0.48                                | 303,482                            |
|                                    | OTHER                                                             | 1,344,071,422                                      | 1,528,432,142                                      | 2.20                                | 31,597,539                         |
|                                    | <b>TOTAL ACCOUNT 376</b>                                          | <b>1,411,414,021</b>                               | <b>1,588,286,041</b>                               | <b>2.11</b>                         | <b>31,906,688</b>                  |
| 378                                | MEASURING AND REGULATING EQUIPMENT - GENERAL                      | 58,450,087                                         | 80,847,167                                         | 3.98                                | 2,772,015                          |
| 379.1                              | MEASURING AND REGULATING EQUIPMENT - CITY GATE                    | 140,228                                            | 140,228                                            | 2.87                                | 4,025                              |
| 380                                | <b>SERVICES</b>                                                   |                                                    |                                                    |                                     |                                    |
|                                    | BARE STEEL                                                        | 898,311                                            | 750,358                                            | 2.05                                | 16,899                             |
|                                    | OTHER                                                             | 483,475,480                                        | 530,624,172                                        | 2.90                                | 14,704,445                         |
|                                    | <b>TOTAL ACCOUNT 380</b>                                          | <b>484,373,791</b>                                 | <b>531,374,531</b>                                 | <b>2.90</b>                         | <b>14,721,344</b>                  |
| 381                                | <b>METERS</b>                                                     | 37,708,686                                         | 38,642,927                                         | 2.41                                | 920,037                            |
| 381.1                              | METERS - AMR                                                      | 23,950,869                                         | 24,110,646                                         | 7.24                                | 1,739,827                          |
| 382                                | METER INSTALLATIONS                                               | 38,336,244                                         | 40,392,816                                         | 1.89                                | 743,990                            |
| 383                                | HOUSE REGULATORS                                                  | 12,036,518                                         | 12,601,762                                         | 2.20                                | 271,021                            |
| 384                                | HOUSE REGULATOR INSTALLATIONS                                     | 3,864,772                                          | 3,864,772                                          | 1.00                                | 38,648                             |
| 385                                | INDUSTRIAL MEASURING AND REGULATING EQUIPMENT - OTHER THAN METERS | 7,123,056                                          | 8,162,002                                          | 4.66                                | 356,142                            |
| <b>OTHER EQUIPMENT</b>             |                                                                   |                                                    |                                                    |                                     |                                    |
| 387                                | GENERAL                                                           | 136,698                                            | 136,698                                            | 2.77                                | 3,787                              |
| 387.4                              | CUSTOMER INFORMATION SERVICES                                     | 8,021,658                                          | 8,228,024                                          | 5.37                                | 436,304                            |
| 387.5                              | GPS EQUIPMENT                                                     | 2,053,366                                          | 2,053,366                                          | 12.61                               | 258,929                            |
|                                    | <b>TOTAL ACCOUNT 387</b>                                          | <b>10,211,723</b>                                  | <b>10,418,088</b>                                  | <b>6.79</b>                         | <b>699,020</b>                     |
|                                    | <b>TOTAL DISTRIBUTION PLANT</b>                                   | <b>2,106,741,071</b>                               | <b>2,359,359,440</b>                               | <b>2.44</b>                         | <b>54,615,206</b>                  |

COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 3. CALCULATION OF DEPRECIATION ACCRUALS FOR THE TWELVE MONTHS ENDED NOVEMBER 30, 2018

| DEPRECIABLE GROUP           |                                              | ORIGINAL COST<br>AS OF<br>NOVEMBER 30, 2017 | ORIGINAL COST<br>AS OF<br>NOVEMBER 30, 2018 | COMPOSITE<br>ACCRUAL<br>RATE | ANNUAL<br>ACCRUAL<br>AMOUNT |
|-----------------------------|----------------------------------------------|---------------------------------------------|---------------------------------------------|------------------------------|-----------------------------|
| (1)                         |                                              | (2)                                         | (3)                                         | (4)                          | (5)                         |
| <b>GENERAL PLANT</b>        |                                              |                                             |                                             |                              |                             |
| 390.1                       | STRUCTURES AND IMPROVEMENTS - COMMUNICATIONS | 120,070                                     | 120,070                                     | 1.59                         | 1,909                       |
|                             | OFFICE FURNITURE AND EQUIPMENT               |                                             |                                             |                              |                             |
| 391.1                       | FURNITURE                                    | 3,278,018                                   | 2,943,535                                   | 2.97                         | 92,390                      |
| 391.11                      | EQUIPMENT                                    | 91,304                                      | 91,304                                      | 6.47                         | 5,907                       |
| 391.12                      | INFORMATION SYSTEMS                          | 3,117,086                                   | 4,371,161                                   | 20.12                        | 753,318                     |
|                             | TOTAL ACCOUNT 391                            | 6,486,408                                   | 7,406,000                                   | 11.26                        | 851,615                     |
| 392                         | TRANSPORTATION EQUIPMENT - TRAILERS          | 96,521                                      | 59,455                                      | 0.74                         | 577                         |
| 393                         | STORES EQUIPMENT                             | 13,435                                      | 13,435                                      | -                            | 0                           |
|                             | TOOLS, SHOP AND GARAGE EQUIPMENT             |                                             |                                             |                              |                             |
| 394                         | EQUIPMENT                                    | 15,376,593                                  | 16,851,174                                  | 3.69                         | 594,602                     |
| 394.12                      | CNG FACILITIES                               | 1,953,498                                   | 1,953,498                                   | 0.01                         | 195                         |
|                             | TOTAL ACCOUNT 394                            | 17,330,091                                  | 18,804,672                                  | 3.28                         | 594,797                     |
| 395                         | LABORATORY EQUIPMENT                         | 273,740                                     | 273,740                                     | 5.44                         | 14,891                      |
| 396                         | POWER OPERATED EQUIPMENT                     | 1,216,922                                   | 1,036,104                                   | -                            | 0                           |
| 397.5                       | COMMUNICATION EQUIPMENT - TELEMETERING       | 1,276,431                                   | 2,722,165                                   | 11.09                        | 221,722                     |
| 398                         | MISCELLANEOUS EQUIPMENT                      | 1,219,845                                   | 1,228,216                                   | 6.79                         | 83,112                      |
|                             | TOTAL GENERAL PLANT                          | 28,033,464                                  | 31,663,857                                  | 5.49                         | 1,768,623                   |
|                             | SUBTOTAL DEPRECIABLE PLANT                   | 2,140,607,114                               | 2,396,855,877                               | 2.48                         | 56,670,165                  |
| <b>AMORTIZABLE PLANT</b>    |                                              |                                             |                                             |                              |                             |
| 303                         | MISCELLANEOUS INTANGIBLE PLANT               | 27,039,391                                  | 33,925,352                                  | *                            | 3,224,729                   |
| 305                         | STRUCTURES AND IMPROVEMENTS                  |                                             |                                             |                              |                             |
| 362                         | GAS HOLDERS                                  |                                             |                                             |                              |                             |
| 362.1                       | ENVIRONMENTAL REMEDIATION                    |                                             |                                             |                              |                             |
| 374.2                       | LAND, OTHER DISTRIBUTION SYSTEMS             | 477,102                                     | 477,102                                     |                              |                             |
| 375.71                      | STRUCTURES AND IMPROVEMENTS - LEASED         | 2,830,323                                   | 4,087,035                                   | *                            | 179,544                     |
| 389.2                       | LAND AND LAND RIGHTS - LAND RIGHTS           |                                             |                                             |                              |                             |
|                             | SUBTOTAL AMORTIZABLE PLANT                   | 30,346,816                                  | 38,489,489                                  |                              | 3,404,273                   |
| <b>NONDEPRECIABLE PLANT</b> |                                              | 172,413                                     | 172,413                                     |                              |                             |
|                             | TOTAL GAS PLANT                              | 2,171,126,344                               | 2,435,517,779                               |                              | 60,074,438                  |

\* Prorated accruals based on individual asset amortization



## COLUMBIA GAS OF PENNSYLVANIA, INC.

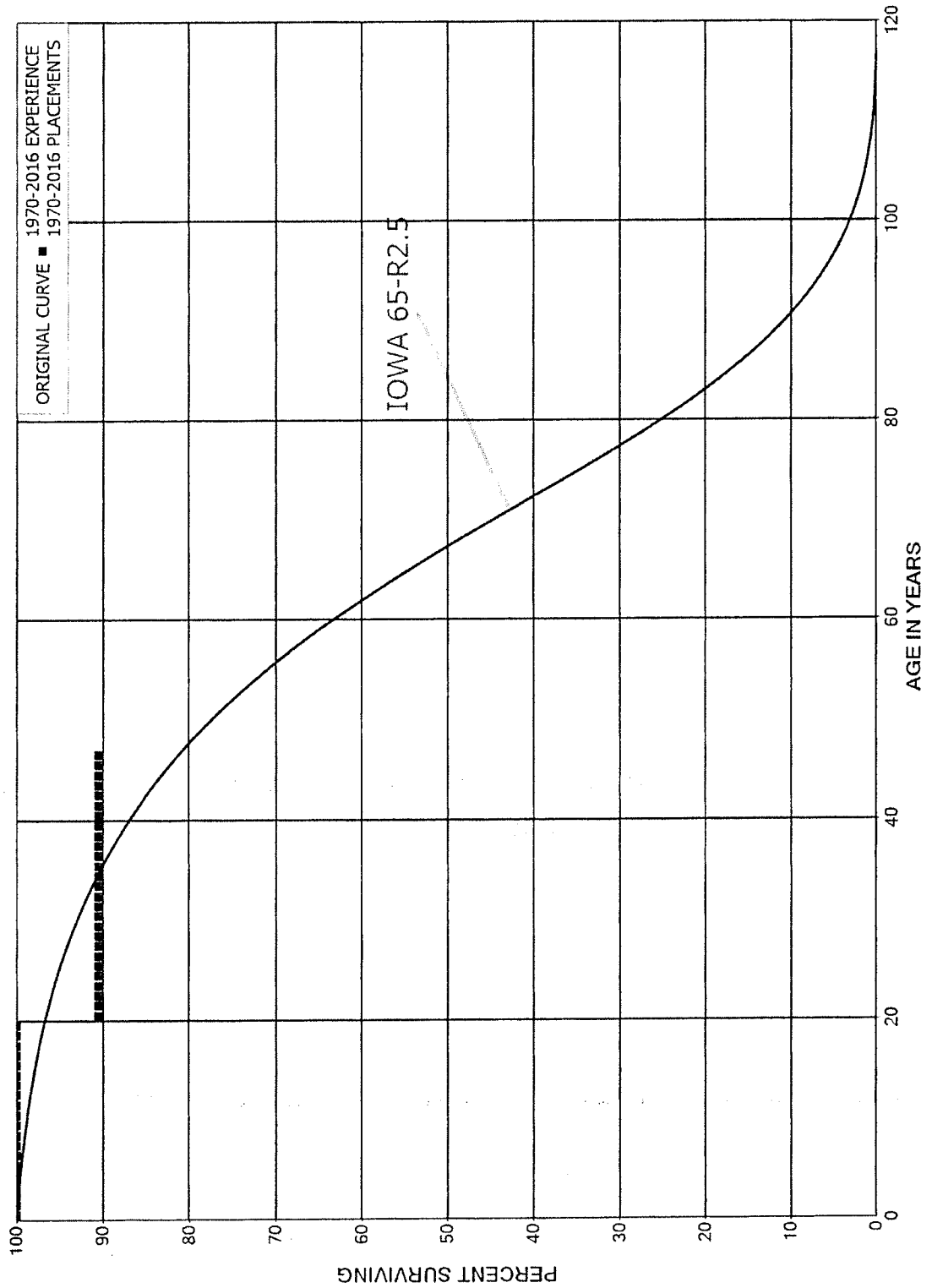
TABLE 4. AMORTIZATION OF EXPERIENCED AND ESTIMATED NET SALVAGE

| ACCOUNT      | 2013                      |                         | 2014                      |                         | 2015                      |                         | 2016                      |                         | 2017                       |                          | NET<br>SALVAGE         | SALVAGE<br>ACCRUAL<br>(13)=(12)/5 |
|--------------|---------------------------|-------------------------|---------------------------|-------------------------|---------------------------|-------------------------|---------------------------|-------------------------|----------------------------|--------------------------|------------------------|-----------------------------------|
|              | COST OF<br>REMOVAL<br>(2) | GROSS<br>SALVAGE<br>(3) | COST OF<br>REMOVAL<br>(4) | GROSS<br>SALVAGE<br>(5) | COST OF<br>REMOVAL<br>(6) | GROSS<br>SALVAGE<br>(7) | COST OF<br>REMOVAL<br>(8) | GROSS<br>SALVAGE<br>(9) | COST OF<br>REMOVAL<br>(10) | GROSS<br>SALVAGE<br>(11) |                        |                                   |
| 351.20       | 608.46                    |                         |                           |                         |                           |                         |                           |                         |                            |                          | (608.46)               | (122)                             |
| 362.10       | 40,496.89                 |                         | 461,689.98                |                         | 56,875.48                 |                         | 27,770.30                 |                         | 56,417.81                  |                          | (643,250.46)           | (128,650)                         |
| 374.20       | 57,633.75                 |                         | (211,267.49)              |                         |                           |                         | 192.38                    |                         |                            |                          | 153,441.36             | 30,688                            |
| 374.40       | 4,911.96                  |                         | 21.91                     |                         | 2,713.76                  |                         | 17.13                     |                         | 38,240.05                  |                          | (45,904.81)            | (9,181)                           |
| 374.50       |                           |                         |                           |                         | 14,909.72                 |                         |                           |                         |                            |                          | (14,909.72)            | (2,982)                           |
| 375.34       | 22,427.70                 |                         | 20,674.45                 |                         |                           |                         | 26,961.80                 |                         | 36,137.31                  |                          | (106,201.26)           | (21,240)                          |
| 375.60       | 1,091.39                  |                         |                           |                         |                           |                         |                           |                         |                            |                          | (1,091.39)             | (218)                             |
| 375.70       |                           |                         |                           |                         | 22,140.00                 |                         |                           |                         |                            |                          | (22,140.00)            | (4,428)                           |
| 376.00       | 691,743.41                | 2,051.59                | 1,281,289.43              |                         | 978,776.00                | 20,828.00               | 1,131,099.09              | 3,855.00                | 1,258,205.78               | 1,297.00                 | (5,313,082.12)         | (1,062,616)                       |
| 378.00       | 216,795.76                |                         | 185,399.17                |                         | 104,647.11                |                         | 63,141.34                 |                         | 247,333.58                 |                          | (817,316.96)           | (163,463)                         |
| 379.10       |                           |                         | 91.84                     |                         |                           |                         |                           |                         |                            |                          | (91.84)                | (18)                              |
| 380.00       | 1,750,826.78              |                         | 4,690,972.30              |                         | 2,926,513.18              |                         | 2,853,156.51              |                         | 2,142,798.48               |                          | (14,364,267.25)        | (2,872,853)                       |
| 381.00       | 23.20                     | 6,554.08                |                           |                         |                           |                         | 675.71                    | 215,365.51              | 4,899.87                   | 34,508.89                | 250,829.70             | 50,166                            |
| 385.00       | 51,158.61                 |                         | 63,312.71                 |                         | 27,745.87                 |                         | 64,142.79                 |                         | 113,814.22                 |                          | (320,174.20)           | (64,035)                          |
| 387.40       | 392.50                    |                         | 933.57                    |                         | 1,060.39                  |                         | 1,807.70                  |                         | 459.97                     |                          | (4,654.13)             | (931)                             |
| 392.00       |                           | 44,482.18               |                           |                         |                           | 26,139.89               |                           |                         |                            |                          | 70,622.07              | 14,124                            |
| 394.00       |                           |                         |                           |                         |                           |                         | 2,431.14                  |                         | 1,648.52                   |                          | (4,079.66)             | (816)                             |
| 396.00       |                           | 104,669.48              |                           |                         |                           | 109,393.82              |                           | 52,454.60               |                            |                          | 266,517.90             | 53,304                            |
| 397.50       |                           |                         |                           |                         | 29,402.56                 |                         |                           |                         | 257.12                     |                          | (29,659.68)            | (5,932)                           |
| <b>TOTAL</b> | <b>2,838,110.41</b>       | <b>157,757.33</b>       | <b>6,493,117.87</b>       | <b>0.00</b>             | <b>4,164,784.07</b>       | <b>156,361.71</b>       | <b>4,171,395.89</b>       | <b>271,675.11</b>       | <b>3,900,212.71</b>        | <b>35,805.89</b>         | <b>(20,946,020.91)</b> | <b>(4,189,203)</b>                |

---

## PART VI. SERVICE LIFE STATISTICS

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



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 351 COMPRESSOR STATION STRUCTURES

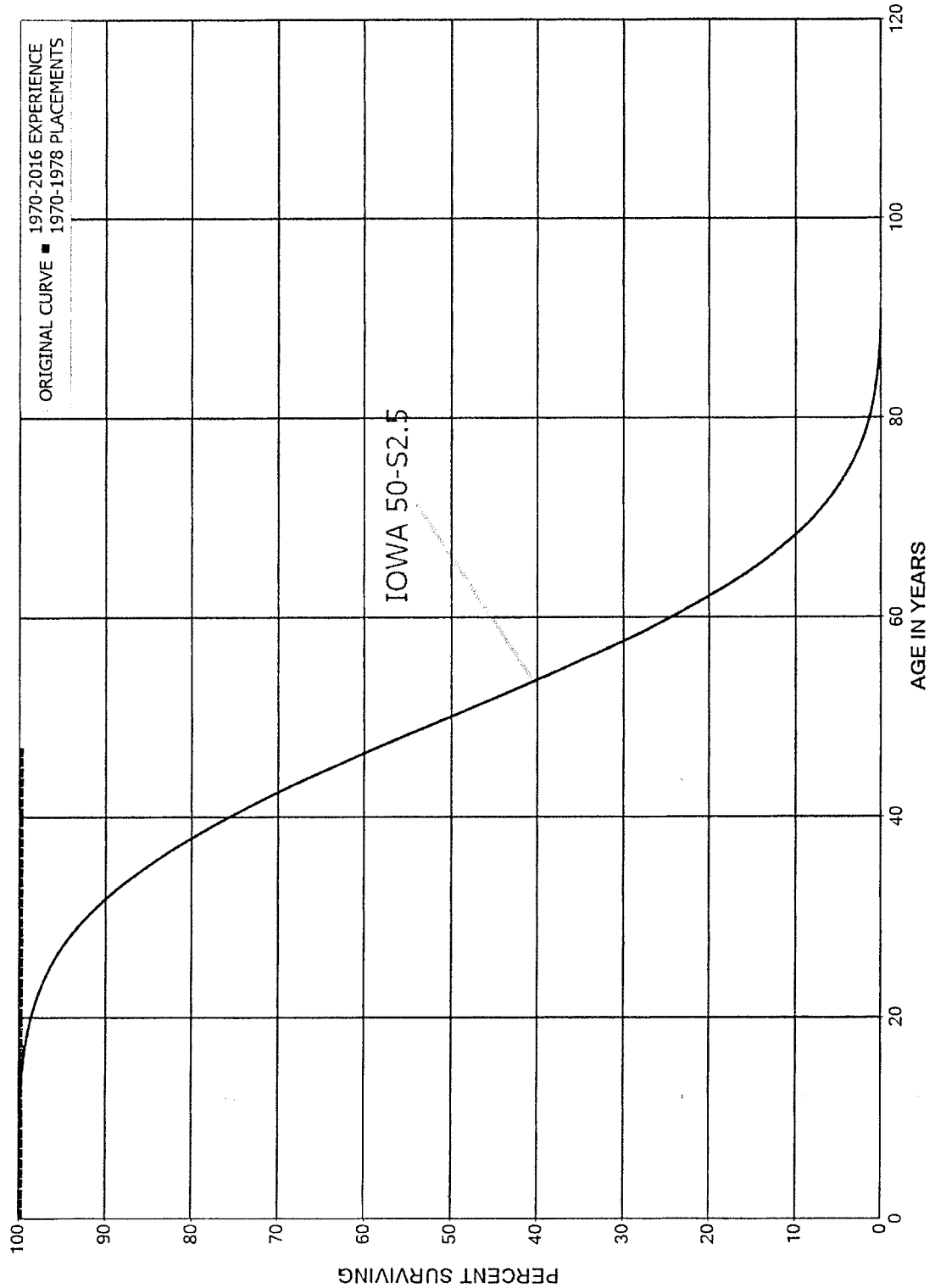
ORIGINAL LIFE TABLE

| PLACEMENT BAND 1970-2016       |                                              |                                       | EXPERIENCE BAND 1970-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 0.0                            | 3,514,931                                    |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 0.5                            | 3,505,381                                    |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 1.5                            | 3,172,764                                    |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 2.5                            | 2,324,895                                    |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 3.5                            | 1,580,396                                    |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 4.5                            | 1,521,279                                    |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 5.5                            | 1,521,279                                    |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 6.5                            | 1,521,279                                    |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 7.5                            | 1,509,979                                    |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 8.5                            | 839,105                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 9.5                            | 839,105                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 10.5                           | 839,105                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 11.5                           | 839,105                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 12.5                           | 643,686                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 13.5                           | 431,518                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 14.5                           | 431,518                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 15.5                           | 341,786                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 16.5                           | 341,786                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 17.5                           | 341,786                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 18.5                           | 333,981                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 19.5                           | 333,048                                      | 31,647                                | 0.0950                    | 0.9050        | 100.00                           |
| 20.5                           | 194,084                                      |                                       | 0.0000                    | 1.0000        | 90.50                            |
| 21.5                           | 194,084                                      |                                       | 0.0000                    | 1.0000        | 90.50                            |
| 22.5                           | 194,084                                      |                                       | 0.0000                    | 1.0000        | 90.50                            |
| 23.5                           | 194,084                                      |                                       | 0.0000                    | 1.0000        | 90.50                            |
| 24.5                           | 194,084                                      |                                       | 0.0000                    | 1.0000        | 90.50                            |
| 25.5                           | 194,084                                      |                                       | 0.0000                    | 1.0000        | 90.50                            |
| 26.5                           | 194,084                                      |                                       | 0.0000                    | 1.0000        | 90.50                            |
| 27.5                           | 194,084                                      |                                       | 0.0000                    | 1.0000        | 90.50                            |
| 28.5                           | 194,084                                      |                                       | 0.0000                    | 1.0000        | 90.50                            |
| 29.5                           | 194,084                                      |                                       | 0.0000                    | 1.0000        | 90.50                            |
| 30.5                           | 194,084                                      |                                       | 0.0000                    | 1.0000        | 90.50                            |
| 31.5                           | 194,084                                      |                                       | 0.0000                    | 1.0000        | 90.50                            |
| 32.5                           | 194,084                                      |                                       | 0.0000                    | 1.0000        | 90.50                            |
| 33.5                           | 194,084                                      |                                       | 0.0000                    | 1.0000        | 90.50                            |
| 34.5                           | 194,084                                      |                                       | 0.0000                    | 1.0000        | 90.50                            |
| 35.5                           | 194,084                                      |                                       | 0.0000                    | 1.0000        | 90.50                            |
| 36.5                           | 194,084                                      |                                       | 0.0000                    | 1.0000        | 90.50                            |
| 37.5                           | 194,084                                      |                                       | 0.0000                    | 1.0000        | 90.50                            |
| 38.5                           | 194,084                                      |                                       | 0.0000                    | 1.0000        | 90.50                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
ACCOUNT 351 COMPRESSOR STATION STRUCTURES  
ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1970-2016       |                                              |                                       | EXPERIENCE BAND 1970-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 39.5                           | 194,084                                      |                                       | 0.0000                    | 1.0000        | 90.50                            |
| 40.5                           | 194,084                                      |                                       | 0.0000                    | 1.0000        | 90.50                            |
| 41.5                           | 194,084                                      |                                       | 0.0000                    | 1.0000        | 90.50                            |
| 42.5                           | 194,084                                      |                                       | 0.0000                    | 1.0000        | 90.50                            |
| 43.5                           | 193,037                                      |                                       | 0.0000                    | 1.0000        | 90.50                            |
| 44.5                           | 169,203                                      |                                       | 0.0000                    | 1.0000        | 90.50                            |
| 45.5                           | 124,247                                      |                                       | 0.0000                    | 1.0000        | 90.50                            |
| 46.5                           |                                              |                                       |                           |               | 90.50                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
 ACCOUNT 352.02 WELLS - EQUIPMENT  
 ORIGINAL AND SMOOTH SURVIVOR CURVES





COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 352.02 WELLS - EQUIPMENT

ORIGINAL LIFE TABLE

| PLACEMENT BAND 1970-1978       |                                              |                                       | EXPERIENCE BAND 1970-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>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                           | 168,680                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 34.5                           | 168,680                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 35.5                           | 168,680                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 36.5                           | 168,680                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 37.5                           | 168,680                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 38.5                           | 166,398                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |

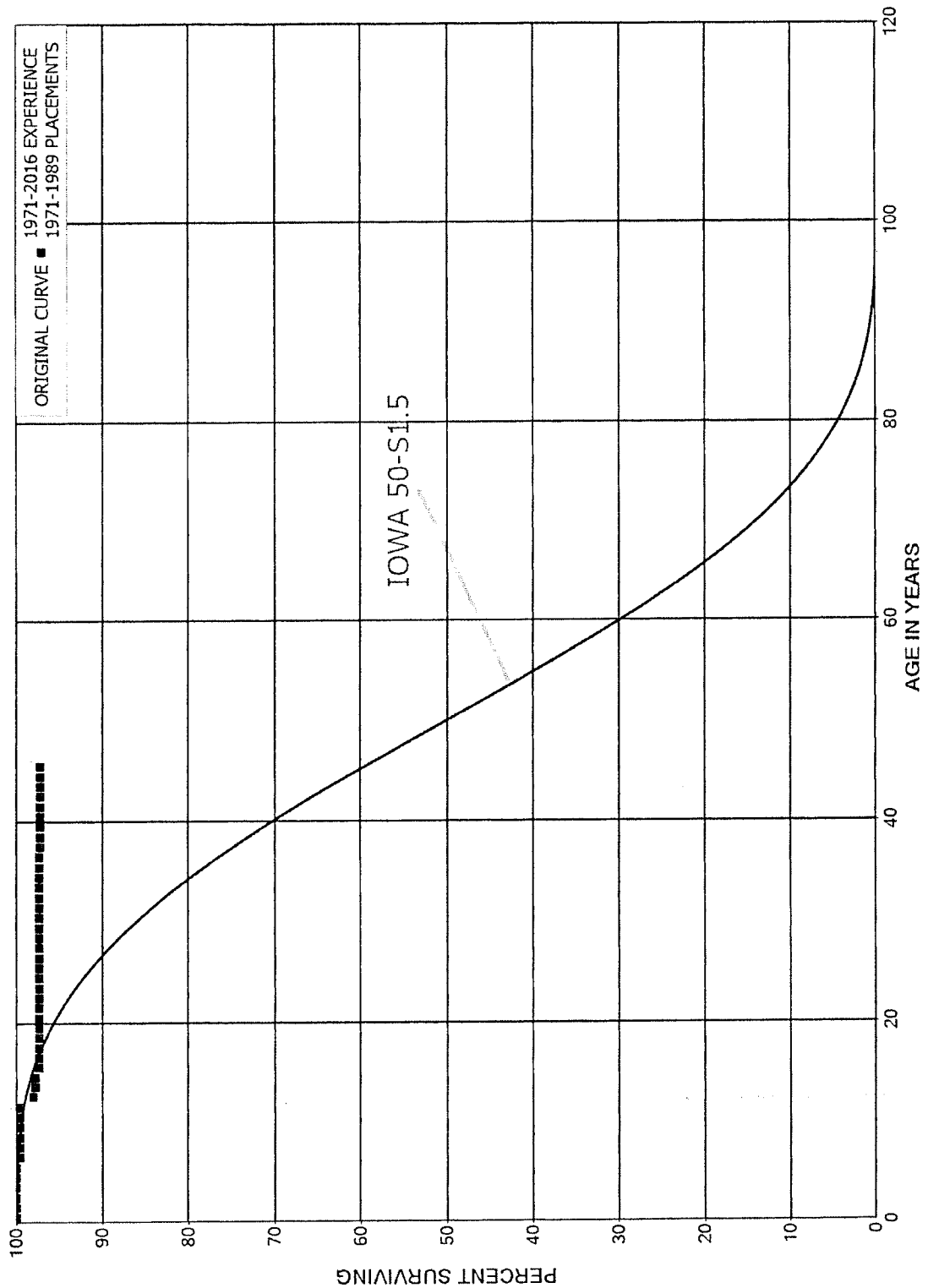
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 352.02 WELLS - EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1970-1978       |                                              |                                       | EXPERIENCE BAND 1970-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 39.5                           | 166,398                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 40.5                           | 166,398                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 41.5                           | 166,398                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 42.5                           | 166,398                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 43.5                           | 166,398                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 44.5                           | 124,111                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 45.5                           | 62,707                                       |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 46.5                           |                                              |                                       |                           |               | 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 1971-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>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                           | 405,549                                      |                                       | 0.0000                    | 1.0000        | 97.24                            |
| 23.5                           | 405,549                                      |                                       | 0.0000                    | 1.0000        | 97.24                            |
| 24.5                           | 405,549                                      |                                       | 0.0000                    | 1.0000        | 97.24                            |
| 25.5                           | 405,549                                      |                                       | 0.0000                    | 1.0000        | 97.24                            |
| 26.5                           | 405,549                                      |                                       | 0.0000                    | 1.0000        | 97.24                            |
| 27.5                           | 391,929                                      |                                       | 0.0000                    | 1.0000        | 97.24                            |
| 28.5                           | 391,929                                      |                                       | 0.0000                    | 1.0000        | 97.24                            |
| 29.5                           | 391,929                                      |                                       | 0.0000                    | 1.0000        | 97.24                            |
| 30.5                           | 391,929                                      |                                       | 0.0000                    | 1.0000        | 97.24                            |
| 31.5                           | 391,929                                      |                                       | 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                           | 377,783                                      |                                       | 0.0000                    | 1.0000        | 97.18                            |

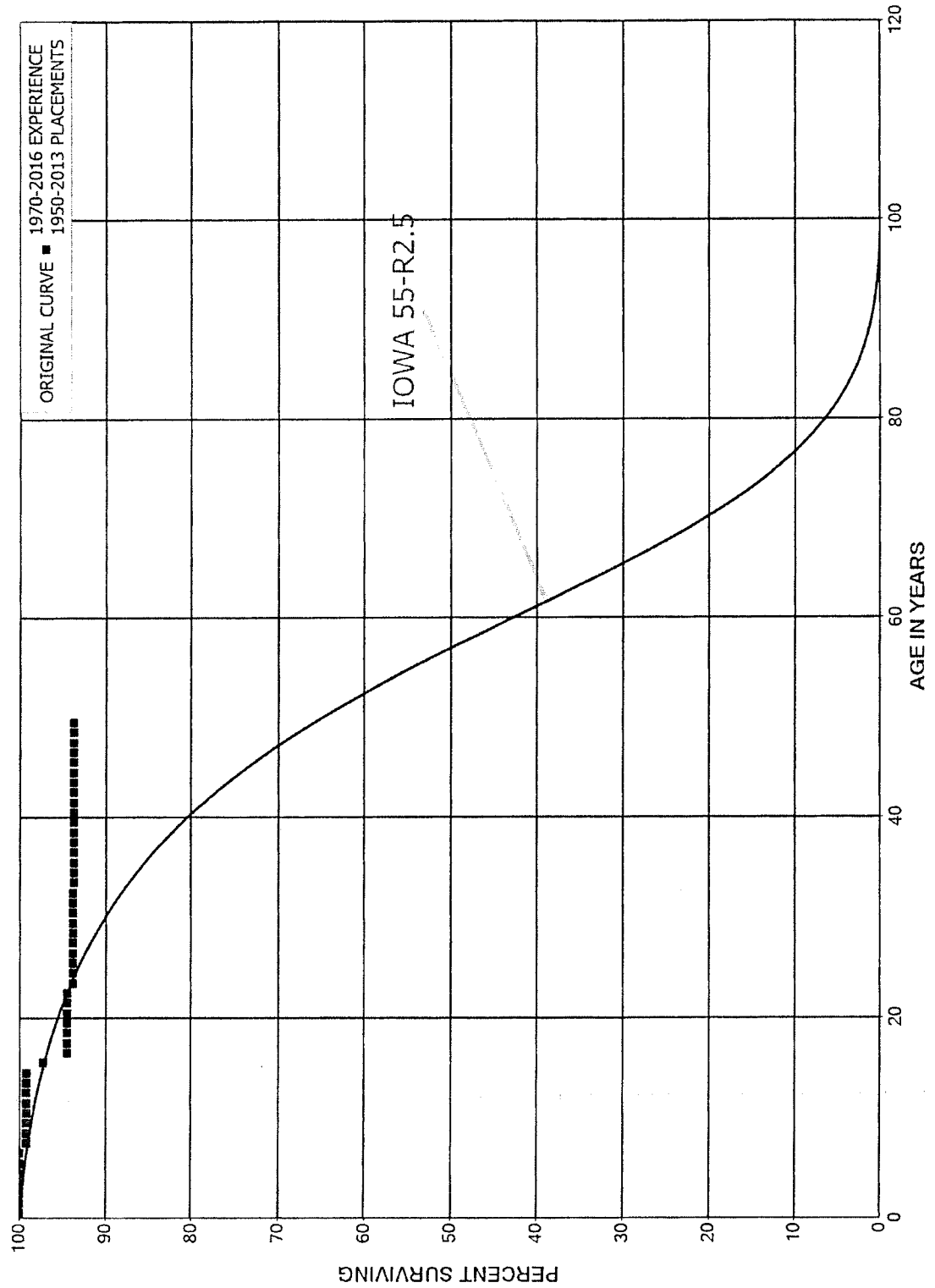
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 353 LINES

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1971-1989       |                                              |                                       | EXPERIENCE BAND 1971-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 39.5                           | 377,783                                      |                                       | 0.0000                    | 1.0000        | 97.18                            |
| 40.5                           | 377,783                                      |                                       | 0.0000                    | 1.0000        | 97.18                            |
| 41.5                           | 377,783                                      |                                       | 0.0000                    | 1.0000        | 97.18                            |
| 42.5                           | 377,783                                      |                                       | 0.0000                    | 1.0000        | 97.18                            |
| 43.5                           | 322,952                                      |                                       | 0.0000                    | 1.0000        | 97.18                            |
| 44.5                           | 260,327                                      |                                       | 0.0000                    | 1.0000        | 97.18                            |
| 45.5                           |                                              |                                       |                           |               | 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 1950-2013       |                                              |                                       | EXPERIENCE BAND 1970-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 0.0                            | 589,028                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 0.5                            | 591,196                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 1.5                            | 871,875                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 2.5                            | 871,875                                      |                                       | 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                           | 583,936                                      |                                       | 0.0000                    | 1.0000        | 94.54                            |
| 19.5                           | 589,278                                      |                                       | 0.0000                    | 1.0000        | 94.54                            |
| 20.5                           | 589,278                                      |                                       | 0.0000                    | 1.0000        | 94.54                            |
| 21.5                           | 589,278                                      |                                       | 0.0000                    | 1.0000        | 94.54                            |
| 22.5                           | 589,130                                      | 4,554                                 | 0.0077                    | 0.9923        | 94.54                            |
| 23.5                           | 580,368                                      |                                       | 0.0000                    | 1.0000        | 93.81                            |
| 24.5                           | 580,368                                      |                                       | 0.0000                    | 1.0000        | 93.81                            |
| 25.5                           | 569,230                                      |                                       | 0.0000                    | 1.0000        | 93.81                            |
| 26.5                           | 569,230                                      |                                       | 0.0000                    | 1.0000        | 93.81                            |
| 27.5                           | 569,230                                      |                                       | 0.0000                    | 1.0000        | 93.81                            |
| 28.5                           | 569,230                                      |                                       | 0.0000                    | 1.0000        | 93.81                            |
| 29.5                           | 549,562                                      |                                       | 0.0000                    | 1.0000        | 93.81                            |
| 30.5                           | 549,562                                      | 96                                    | 0.0002                    | 0.9998        | 93.81                            |
| 31.5                           | 549,466                                      |                                       | 0.0000                    | 1.0000        | 93.79                            |
| 32.5                           | 549,466                                      | 278                                   | 0.0005                    | 0.9995        | 93.79                            |
| 33.5                           | 549,188                                      |                                       | 0.0000                    | 1.0000        | 93.74                            |
| 34.5                           | 549,188                                      |                                       | 0.0000                    | 1.0000        | 93.74                            |
| 35.5                           | 549,188                                      |                                       | 0.0000                    | 1.0000        | 93.74                            |
| 36.5                           | 549,188                                      |                                       | 0.0000                    | 1.0000        | 93.74                            |
| 37.5                           | 547,328                                      |                                       | 0.0000                    | 1.0000        | 93.74                            |
| 38.5                           | 547,328                                      |                                       | 0.0000                    | 1.0000        | 93.74                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

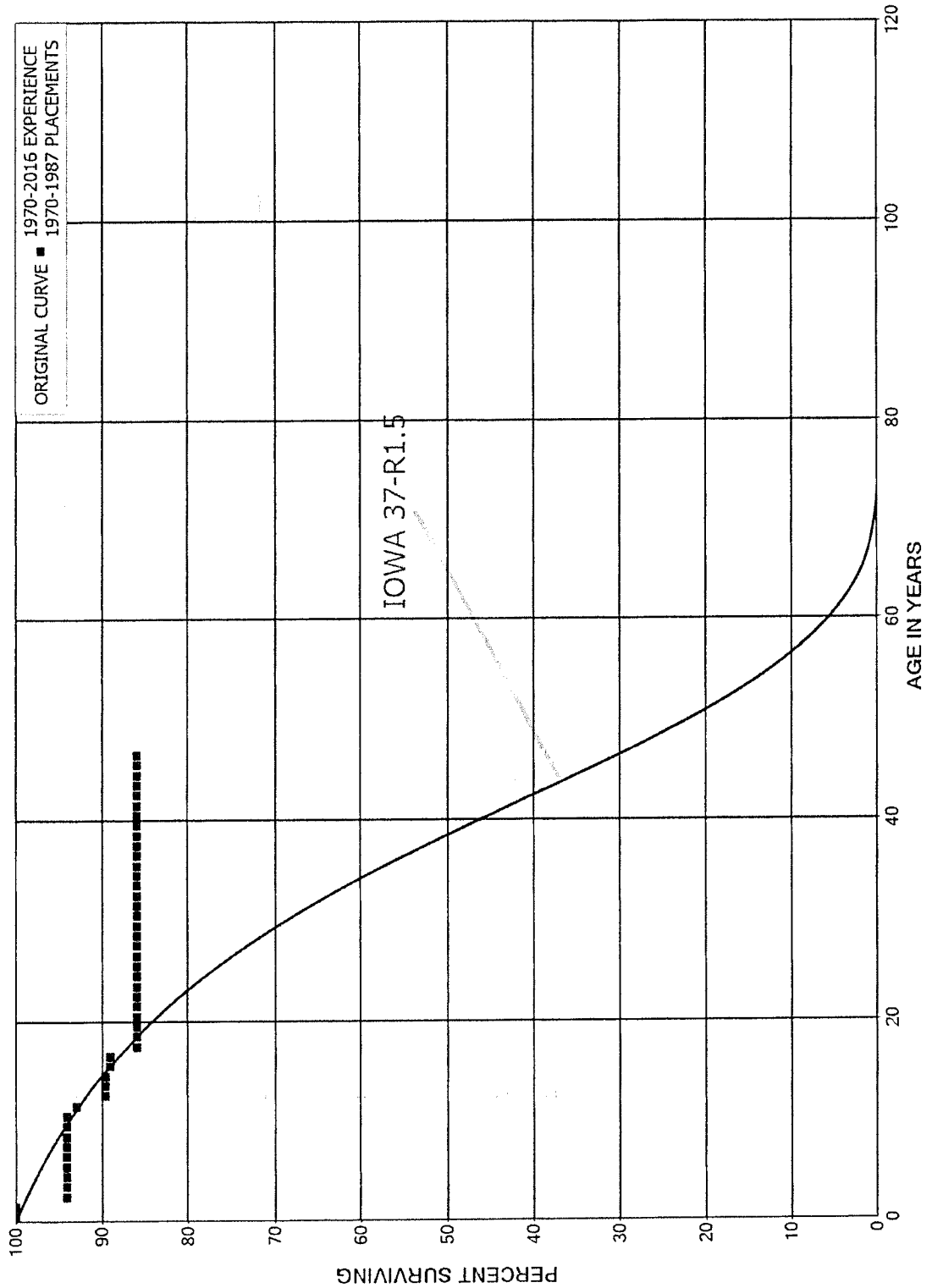
ACCOUNT 354 COMPRESSOR STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1950-2013       |                                              |                                       | EXPERIENCE BAND 1970-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 39.5                           | 547,328                                      | 278                                   | 0.0000                    | 1.0000        | 93.74                            |
| 40.5                           | 547,328                                      |                                       | 0.0000                    | 1.0000        | 93.74                            |
| 41.5                           | 550,177                                      |                                       | 0.0005                    | 0.9995        | 93.74                            |
| 42.5                           | 549,900                                      |                                       | 0.0000                    | 1.0000        | 93.69                            |
| 43.5                           | 549,900                                      |                                       | 0.0000                    | 1.0000        | 93.69                            |
| 44.5                           | 545,774                                      |                                       | 0.0000                    | 1.0000        | 93.69                            |
| 45.5                           | 524,515                                      |                                       | 0.0000                    | 1.0000        | 93.69                            |
| 46.5                           | 32,939                                       |                                       | 0.0000                    | 1.0000        | 93.69                            |
| 47.5                           | 30,771                                       |                                       | 0.0000                    | 1.0000        | 93.69                            |
| 48.5                           | 30,771                                       |                                       | 0.0000                    | 1.0000        | 93.69                            |
| 49.5                           | 29,595                                       |                                       | 0.0000                    | 1.0000        | 93.69                            |
| 50.5                           | 29,595                                       |                                       | 0.0000                    | 1.0000        | 93.69                            |
| 51.5                           | 29,595                                       |                                       | 0.0000                    | 1.0000        | 93.69                            |
| 52.5                           | 29,595                                       |                                       | 0.0000                    | 1.0000        | 93.69                            |
| 53.5                           | 29,595                                       |                                       | 0.0000                    | 1.0000        | 93.69                            |
| 54.5                           | 29,595                                       |                                       | 0.0000                    | 1.0000        | 93.69                            |
| 55.5                           | 29,595                                       |                                       | 0.0000                    | 1.0000        | 93.69                            |
| 56.5                           | 29,595                                       |                                       | 0.0000                    | 1.0000        | 93.69                            |
| 57.5                           | 29,595                                       |                                       | 0.0000                    | 1.0000        | 93.69                            |
| 58.5                           | 29,595                                       |                                       | 0.0000                    | 1.0000        | 93.69                            |
| 59.5                           | 29,231                                       |                                       | 0.0000                    | 1.0000        | 93.69                            |
| 60.5                           | 29,231                                       |                                       | 0.0000                    | 1.0000        | 93.69                            |
| 61.5                           | 29,231                                       |                                       | 0.0000                    | 1.0000        | 93.69                            |
| 62.5                           | 29,231                                       |                                       | 0.0000                    | 1.0000        | 93.69                            |
| 63.5                           | 29,231                                       |                                       | 0.0000                    | 1.0000        | 93.69                            |
| 64.5                           | 5,343                                        |                                       | 0.0000                    | 1.0000        | 93.69                            |
| 65.5                           | 5,343                                        |                                       | 0.0000                    | 1.0000        | 93.69                            |
| 66.5                           |                                              |                                       |                           |               | 93.69                            |



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 1970-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>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                           | 123,010                                      |                                       | 0.0000         | 1.0000        | 85.97                            |
| 25.5                           | 123,010                                      |                                       | 0.0000         | 1.0000        | 85.97                            |
| 26.5                           | 123,010                                      |                                       | 0.0000         | 1.0000        | 85.97                            |
| 27.5                           | 123,010                                      |                                       | 0.0000         | 1.0000        | 85.97                            |
| 28.5                           | 123,010                                      |                                       | 0.0000         | 1.0000        | 85.97                            |
| 29.5                           | 120,675                                      |                                       | 0.0000         | 1.0000        | 85.97                            |
| 30.5                           | 91,185                                       |                                       | 0.0000         | 1.0000        | 85.97                            |
| 31.5                           | 91,185                                       |                                       | 0.0000         | 1.0000        | 85.97                            |
| 32.5                           | 91,185                                       |                                       | 0.0000         | 1.0000        | 85.97                            |
| 33.5                           | 91,185                                       |                                       | 0.0000         | 1.0000        | 85.97                            |
| 34.5                           | 91,185                                       |                                       | 0.0000         | 1.0000        | 85.97                            |
| 35.5                           | 77,447                                       |                                       | 0.0000         | 1.0000        | 85.97                            |
| 36.5                           | 77,447                                       |                                       | 0.0000         | 1.0000        | 85.97                            |
| 37.5                           | 77,447                                       |                                       | 0.0000         | 1.0000        | 85.97                            |
| 38.5                           | 77,447                                       |                                       | 0.0000         | 1.0000        | 85.97                            |

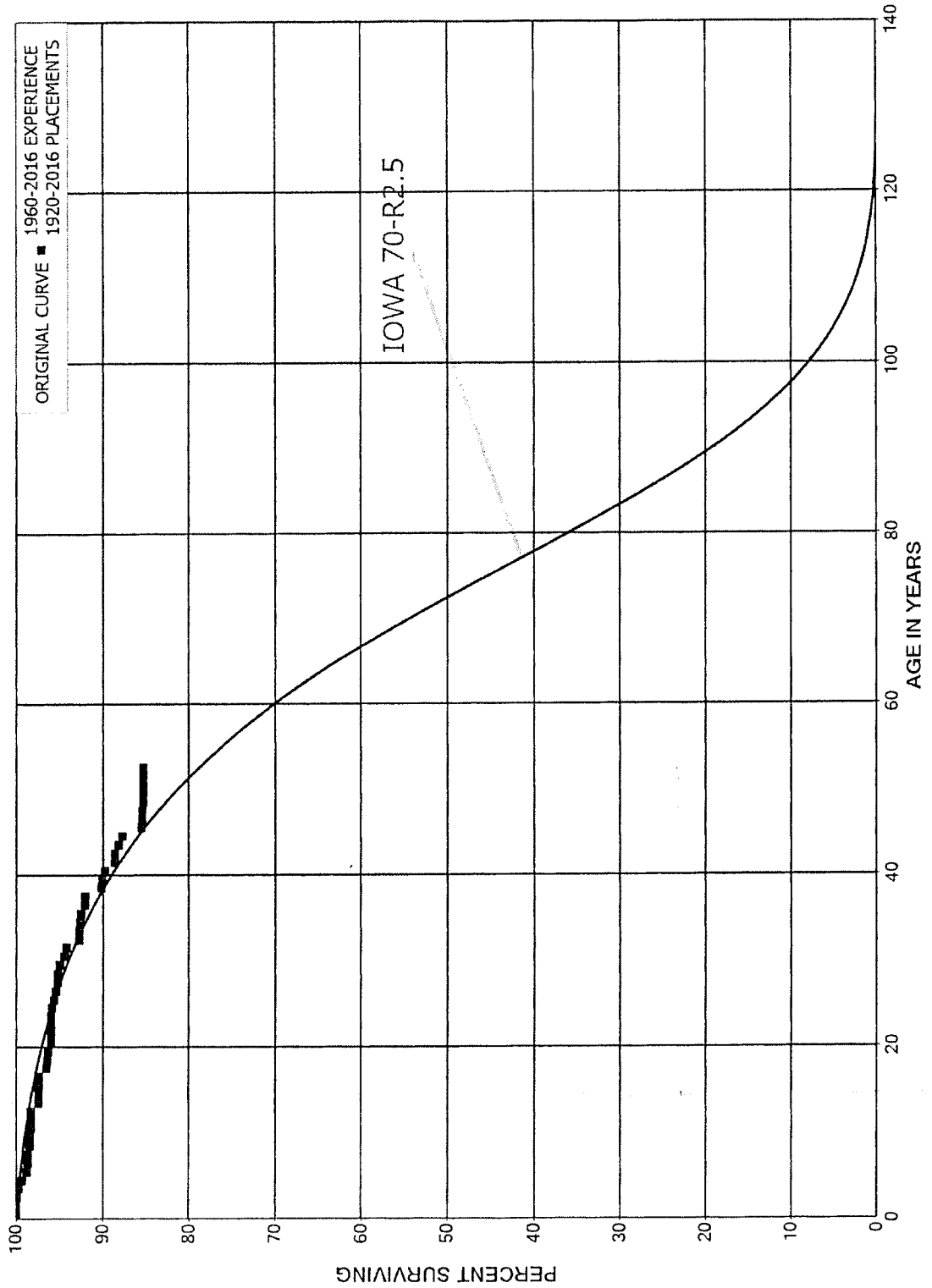
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 355 MEASURING AND REGULATING EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1970-1987       |                                              |                                       | EXPERIENCE BAND 1970-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 39.5                           | 77,447                                       |                                       | 0.0000                    | 1.0000        | 85.97                            |
| 40.5                           | 77,447                                       |                                       | 0.0000                    | 1.0000        | 85.97                            |
| 41.5                           | 74,762                                       |                                       | 0.0000                    | 1.0000        | 85.97                            |
| 42.5                           | 74,762                                       |                                       | 0.0000                    | 1.0000        | 85.97                            |
| 43.5                           | 74,762                                       |                                       | 0.0000                    | 1.0000        | 85.97                            |
| 44.5                           | 74,762                                       |                                       | 0.0000                    | 1.0000        | 85.97                            |
| 45.5                           | 74,762                                       |                                       | 0.0000                    | 1.0000        | 85.97                            |
| 46.5                           |                                              |                                       |                           |               | 85.97                            |

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



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 374.4 LAND RIGHTS

ORIGINAL LIFE TABLE

| PLACEMENT BAND 1920-2016       |                                              |                                       | EXPERIENCE BAND 1960-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 0.0                            | 2,682,712                                    | 2                                     | 0.0000                    | 1.0000        | 100.00                           |
| 0.5                            | 2,528,139                                    |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 1.5                            | 2,417,002                                    | 3,515                                 | 0.0015                    | 0.9985        | 100.00                           |
| 2.5                            | 2,322,804                                    | 5,207                                 | 0.0022                    | 0.9978        | 99.85                            |
| 3.5                            | 2,125,948                                    | 8,146                                 | 0.0038                    | 0.9962        | 99.63                            |
| 4.5                            | 1,899,422                                    | 10,326                                | 0.0054                    | 0.9946        | 99.25                            |
| 5.5                            | 1,814,952                                    | 2,322                                 | 0.0013                    | 0.9987        | 98.71                            |
| 6.5                            | 1,731,737                                    |                                       | 0.0000                    | 1.0000        | 98.58                            |
| 7.5                            | 1,576,959                                    | 3,086                                 | 0.0020                    | 0.9980        | 98.58                            |
| 8.5                            | 1,546,073                                    |                                       | 0.0000                    | 1.0000        | 98.39                            |
| 9.5                            | 1,478,167                                    | 1,484                                 | 0.0010                    | 0.9990        | 98.39                            |
| 10.5                           | 1,439,019                                    | 700                                   | 0.0005                    | 0.9995        | 98.29                            |
| 11.5                           | 1,411,533                                    |                                       | 0.0000                    | 1.0000        | 98.24                            |
| 12.5                           | 1,365,264                                    | 11,977                                | 0.0088                    | 0.9912        | 98.24                            |
| 13.5                           | 1,309,623                                    | 301                                   | 0.0002                    | 0.9998        | 97.38                            |
| 14.5                           | 1,306,295                                    | 25                                    | 0.0000                    | 1.0000        | 97.36                            |
| 15.5                           | 1,291,663                                    | 23                                    | 0.0000                    | 1.0000        | 97.36                            |
| 16.5                           | 1,277,421                                    | 10,647                                | 0.0083                    | 0.9917        | 97.36                            |
| 17.5                           | 1,262,848                                    | 1,974                                 | 0.0016                    | 0.9984        | 96.54                            |
| 18.5                           | 1,251,691                                    | 2,120                                 | 0.0017                    | 0.9983        | 96.39                            |
| 19.5                           | 1,208,230                                    | 2,927                                 | 0.0024                    | 0.9976        | 96.23                            |
| 20.5                           | 1,159,280                                    | 991                                   | 0.0009                    | 0.9991        | 96.00                            |
| 21.5                           | 1,139,018                                    | 182                                   | 0.0002                    | 0.9998        | 95.91                            |
| 22.5                           | 1,103,539                                    |                                       | 0.0000                    | 1.0000        | 95.90                            |
| 23.5                           | 1,060,219                                    | 150                                   | 0.0001                    | 0.9999        | 95.90                            |
| 24.5                           | 1,046,603                                    | 3,174                                 | 0.0030                    | 0.9970        | 95.89                            |
| 25.5                           | 994,182                                      | 1,712                                 | 0.0017                    | 0.9983        | 95.60                            |
| 26.5                           | 908,405                                      | 2,093                                 | 0.0023                    | 0.9977        | 95.43                            |
| 27.5                           | 775,169                                      | 42                                    | 0.0001                    | 0.9999        | 95.21                            |
| 28.5                           | 676,283                                      | 1,775                                 | 0.0026                    | 0.9974        | 95.21                            |
| 29.5                           | 610,623                                      | 3,601                                 | 0.0059                    | 0.9941        | 94.96                            |
| 30.5                           | 567,009                                      | 1,629                                 | 0.0029                    | 0.9971        | 94.40                            |
| 31.5                           | 499,340                                      | 7,678                                 | 0.0154                    | 0.9846        | 94.12                            |
| 32.5                           | 446,874                                      | 13                                    | 0.0000                    | 1.0000        | 92.68                            |
| 33.5                           | 406,638                                      | 187                                   | 0.0005                    | 0.9995        | 92.67                            |
| 34.5                           | 343,518                                      | 281                                   | 0.0008                    | 0.9992        | 92.63                            |
| 35.5                           | 303,252                                      | 1,639                                 | 0.0054                    | 0.9946        | 92.56                            |
| 36.5                           | 278,613                                      |                                       | 0.0000                    | 1.0000        | 92.06                            |
| 37.5                           | 242,052                                      | 5,062                                 | 0.0209                    | 0.9791        | 92.06                            |
| 38.5                           | 215,798                                      | 287                                   | 0.0013                    | 0.9987        | 90.13                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 374.4 LAND RIGHTS

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1920-2016       |                                              |                                       | EXPERIENCE BAND 1960-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 39.5                           | 162,631                                      | 523                                   | 0.0032                    | 0.9968        | 90.01                            |
| 40.5                           | 137,763                                      | 1,778                                 | 0.0129                    | 0.9871        | 89.72                            |
| 41.5                           | 110,713                                      |                                       | 0.0000                    | 1.0000        | 88.56                            |
| 42.5                           | 94,026                                       | 444                                   | 0.0047                    | 0.9953        | 88.56                            |
| 43.5                           | 88,098                                       | 420                                   | 0.0048                    | 0.9952        | 88.15                            |
| 44.5                           | 76,023                                       | 1,952                                 | 0.0257                    | 0.9743        | 87.72                            |
| 45.5                           | 53,372                                       | 74                                    | 0.0014                    | 0.9986        | 85.47                            |
| 46.5                           | 44,736                                       | 4                                     | 0.0001                    | 0.9999        | 85.35                            |
| 47.5                           | 32,486                                       | 20                                    | 0.0006                    | 0.9994        | 85.35                            |
| 48.5                           | 30,470                                       | 14                                    | 0.0005                    | 0.9995        | 85.29                            |
| 49.5                           | 19,003                                       | 6                                     | 0.0003                    | 0.9997        | 85.26                            |
| 50.5                           | 16,622                                       |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 51.5                           | 15,474                                       |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 52.5                           | 11,770                                       | 0                                     | 0.0000                    | 1.0000        | 85.23                            |
| 53.5                           | 6,044                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 54.5                           | 5,720                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 55.5                           | 4,889                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 56.5                           | 4,889                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 57.5                           | 4,889                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 58.5                           | 4,889                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 59.5                           | 1,637                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 60.5                           | 1,637                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 61.5                           | 1,637                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 62.5                           | 1,637                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 63.5                           | 1,635                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 64.5                           | 1,635                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 65.5                           | 1,635                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 66.5                           | 1,635                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 67.5                           | 1,635                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 68.5                           | 1,635                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 69.5                           | 1,635                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 70.5                           | 1,635                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 71.5                           | 1,635                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 72.5                           | 1,635                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 73.5                           | 1,635                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 74.5                           | 1,635                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 75.5                           | 1,635                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 76.5                           | 1,635                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 77.5                           | 1,635                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 78.5                           | 1,635                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |

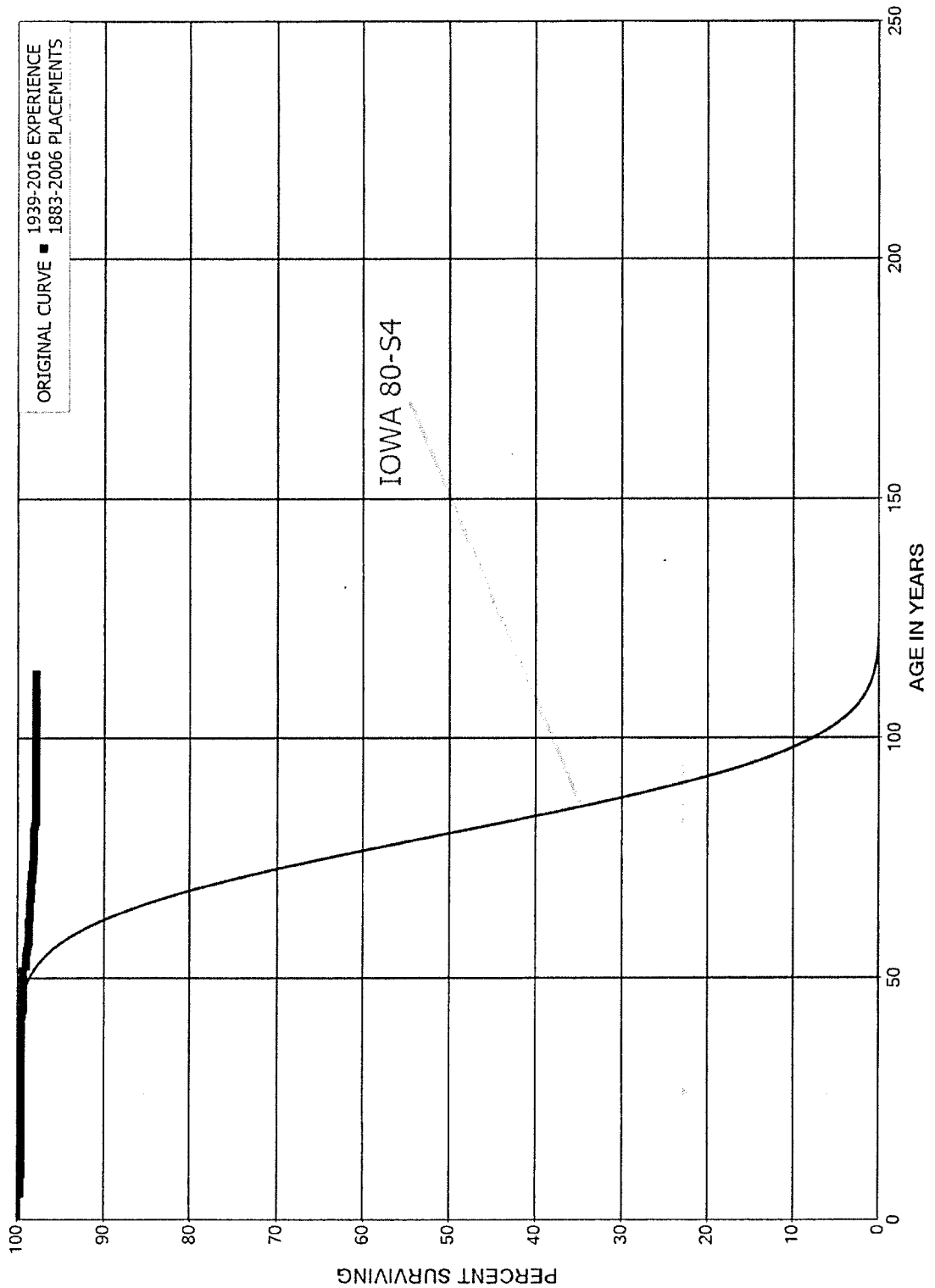
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 374.4 LAND RIGHTS

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1920-2016       |                                              |                                       | EXPERIENCE BAND 1960-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 79.5                           | 1,635                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 80.5                           | 1,635                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 81.5                           | 1,635                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 82.5                           | 1,635                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 83.5                           | 1,635                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 84.5                           | 1,635                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 85.5                           | 1,635                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 86.5                           | 1,635                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 87.5                           | 1,635                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 88.5                           | 1,635                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 89.5                           | 1,635                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 90.5                           | 1,635                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 91.5                           | 1,635                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 92.5                           | 1,635                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 93.5                           | 1,635                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 94.5                           | 1,635                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 95.5                           | 1,635                                        |                                       | 0.0000                    | 1.0000        | 85.23                            |
| 96.5                           |                                              |                                       |                           |               | 85.23                            |

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





COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 374.5 RIGHTS OF WAY

ORIGINAL LIFE TABLE

PLACEMENT BAND 1883-2006

EXPERIENCE BAND 1939-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 0.0                            | 2,668,658                                    | 729                                   | 0.0003         | 0.9997        | 100.00                           |
| 0.5                            | 2,673,929                                    |                                       | 0.0000         | 1.0000        | 99.97                            |
| 1.5                            | 2,685,308                                    | 182                                   | 0.0001         | 0.9999        | 99.97                            |
| 2.5                            | 2,717,783                                    | 6                                     | 0.0000         | 1.0000        | 99.97                            |
| 3.5                            | 2,748,908                                    |                                       | 0.0000         | 1.0000        | 99.97                            |
| 4.5                            | 2,769,282                                    | 10,591                                | 0.0038         | 0.9962        | 99.97                            |
| 5.5                            | 2,779,522                                    | 486                                   | 0.0002         | 0.9998        | 99.58                            |
| 6.5                            | 2,793,487                                    | 29                                    | 0.0000         | 1.0000        | 99.57                            |
| 7.5                            | 2,864,443                                    |                                       | 0.0000         | 1.0000        | 99.56                            |
| 8.5                            | 2,904,095                                    | 223                                   | 0.0001         | 0.9999        | 99.56                            |
| 9.5                            | 2,914,209                                    | 124                                   | 0.0000         | 1.0000        | 99.56                            |
| 10.5                           | 2,924,439                                    | 5                                     | 0.0000         | 1.0000        | 99.55                            |
| 11.5                           | 2,927,502                                    |                                       | 0.0000         | 1.0000        | 99.55                            |
| 12.5                           | 2,928,607                                    | 106                                   | 0.0000         | 1.0000        | 99.55                            |
| 13.5                           | 2,929,717                                    |                                       | 0.0000         | 1.0000        | 99.55                            |
| 14.5                           | 2,760,123                                    | 1                                     | 0.0000         | 1.0000        | 99.55                            |
| 15.5                           | 2,722,386                                    |                                       | 0.0000         | 1.0000        | 99.55                            |
| 16.5                           | 2,707,028                                    | 130                                   | 0.0000         | 1.0000        | 99.55                            |
| 17.5                           | 2,712,988                                    | 88                                    | 0.0000         | 1.0000        | 99.54                            |
| 18.5                           | 2,674,824                                    | 141                                   | 0.0001         | 0.9999        | 99.54                            |
| 19.5                           | 2,608,131                                    |                                       | 0.0000         | 1.0000        | 99.54                            |
| 20.5                           | 2,483,902                                    |                                       | 0.0000         | 1.0000        | 99.54                            |
| 21.5                           | 1,906,689                                    |                                       | 0.0000         | 1.0000        | 99.54                            |
| 22.5                           | 1,723,443                                    |                                       | 0.0000         | 1.0000        | 99.54                            |
| 23.5                           | 1,667,021                                    |                                       | 0.0000         | 1.0000        | 99.54                            |
| 24.5                           | 1,613,272                                    |                                       | 0.0000         | 1.0000        | 99.54                            |
| 25.5                           | 1,591,505                                    |                                       | 0.0000         | 1.0000        | 99.54                            |
| 26.5                           | 1,549,659                                    |                                       | 0.0000         | 1.0000        | 99.54                            |
| 27.5                           | 1,484,295                                    |                                       | 0.0000         | 1.0000        | 99.54                            |
| 28.5                           | 1,477,096                                    | 38                                    | 0.0000         | 1.0000        | 99.54                            |
| 29.5                           | 1,451,757                                    | 142                                   | 0.0001         | 0.9999        | 99.53                            |
| 30.5                           | 1,437,864                                    |                                       | 0.0000         | 1.0000        | 99.52                            |
| 31.5                           | 1,366,264                                    | 271                                   | 0.0002         | 0.9998        | 99.52                            |
| 32.5                           | 1,340,854                                    | 5                                     | 0.0000         | 1.0000        | 99.50                            |
| 33.5                           | 1,319,337                                    | 35                                    | 0.0000         | 1.0000        | 99.50                            |
| 34.5                           | 1,284,508                                    | 46                                    | 0.0000         | 1.0000        | 99.50                            |
| 35.5                           | 1,235,810                                    |                                       | 0.0000         | 1.0000        | 99.50                            |
| 36.5                           | 1,214,282                                    | 171                                   | 0.0001         | 0.9999        | 99.50                            |
| 37.5                           | 1,193,365                                    | 163                                   | 0.0001         | 0.9999        | 99.48                            |
| 38.5                           | 1,176,702                                    |                                       | 0.0000         | 1.0000        | 99.47                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 374.5 RIGHTS OF WAY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1883-2006

EXPERIENCE BAND 1939-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 39.5                           | 1,129,031                                    | 136                                   | 0.0001         | 0.9999        | 99.47                            |
| 40.5                           | 1,087,553                                    | 72                                    | 0.0001         | 0.9999        | 99.46                            |
| 41.5                           | 1,039,274                                    | 435                                   | 0.0004         | 0.9996        | 99.45                            |
| 42.5                           | 999,437                                      | 807                                   | 0.0008         | 0.9992        | 99.41                            |
| 43.5                           | 968,447                                      | 4                                     | 0.0000         | 1.0000        | 99.33                            |
| 44.5                           | 895,050                                      | 118                                   | 0.0001         | 0.9999        | 99.33                            |
| 45.5                           | 842,244                                      | 7                                     | 0.0000         | 1.0000        | 99.32                            |
| 46.5                           | 798,838                                      | 6                                     | 0.0000         | 1.0000        | 99.31                            |
| 47.5                           | 755,576                                      | 142                                   | 0.0002         | 0.9998        | 99.31                            |
| 48.5                           | 675,846                                      | 44                                    | 0.0001         | 0.9999        | 99.30                            |
| 49.5                           | 586,282                                      | 91                                    | 0.0002         | 0.9998        | 99.29                            |
| 50.5                           | 571,647                                      | 33                                    | 0.0001         | 0.9999        | 99.27                            |
| 51.5                           | 554,664                                      | 1,697                                 | 0.0031         | 0.9969        | 99.27                            |
| 52.5                           | 516,059                                      | 1                                     | 0.0000         | 1.0000        | 98.96                            |
| 53.5                           | 493,182                                      | 21                                    | 0.0000         | 1.0000        | 98.96                            |
| 54.5                           | 485,476                                      | 863                                   | 0.0018         | 0.9982        | 98.96                            |
| 55.5                           | 475,824                                      | 49                                    | 0.0001         | 0.9999        | 98.78                            |
| 56.5                           | 460,129                                      | 827                                   | 0.0018         | 0.9982        | 98.77                            |
| 57.5                           | 438,261                                      | 1                                     | 0.0000         | 1.0000        | 98.60                            |
| 58.5                           | 390,900                                      | 12                                    | 0.0000         | 1.0000        | 98.60                            |
| 59.5                           | 381,346                                      | 2                                     | 0.0000         | 1.0000        | 98.59                            |
| 60.5                           | 339,584                                      | 84                                    | 0.0002         | 0.9998        | 98.59                            |
| 61.5                           | 313,359                                      | 123                                   | 0.0004         | 0.9996        | 98.57                            |
| 62.5                           | 295,815                                      |                                       | 0.0000         | 1.0000        | 98.53                            |
| 63.5                           | 292,460                                      |                                       | 0.0000         | 1.0000        | 98.53                            |
| 64.5                           | 286,102                                      |                                       | 0.0000         | 1.0000        | 98.53                            |
| 65.5                           | 276,694                                      | 285                                   | 0.0010         | 0.9990        | 98.53                            |
| 66.5                           | 257,787                                      |                                       | 0.0000         | 1.0000        | 98.43                            |
| 67.5                           | 245,162                                      |                                       | 0.0000         | 1.0000        | 98.43                            |
| 68.5                           | 250,785                                      | 203                                   | 0.0008         | 0.9992        | 98.43                            |
| 69.5                           | 251,951                                      | 69                                    | 0.0003         | 0.9997        | 98.35                            |
| 70.5                           | 259,841                                      | 14                                    | 0.0001         | 0.9999        | 98.32                            |
| 71.5                           | 264,704                                      | 282                                   | 0.0011         | 0.9989        | 98.32                            |
| 72.5                           | 261,558                                      | 72                                    | 0.0003         | 0.9997        | 98.21                            |
| 73.5                           | 268,676                                      | 200                                   | 0.0007         | 0.9993        | 98.19                            |
| 74.5                           | 263,571                                      |                                       | 0.0000         | 1.0000        | 98.11                            |
| 75.5                           | 259,759                                      |                                       | 0.0000         | 1.0000        | 98.11                            |
| 76.5                           | 250,596                                      | 182                                   | 0.0007         | 0.9993        | 98.11                            |
| 77.5                           | 249,650                                      | 2                                     | 0.0000         | 1.0000        | 98.04                            |
| 78.5                           | 248,403                                      | 40                                    | 0.0002         | 0.9998        | 98.04                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 374.5 RIGHTS OF WAY

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1883-2006       |                                              |                                       | EXPERIENCE BAND 1939-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 79.5                           | 244,783                                      |                                       | 0.0000                    | 1.0000        | 98.02                            |
| 80.5                           | 239,789                                      | 136                                   | 0.0006                    | 0.9994        | 98.02                            |
| 81.5                           | 238,747                                      | 233                                   | 0.0010                    | 0.9990        | 97.97                            |
| 82.5                           | 234,493                                      | 2                                     | 0.0000                    | 1.0000        | 97.87                            |
| 83.5                           | 231,950                                      | 3                                     | 0.0000                    | 1.0000        | 97.87                            |
| 84.5                           | 229,916                                      |                                       | 0.0000                    | 1.0000        | 97.87                            |
| 85.5                           | 225,220                                      |                                       | 0.0000                    | 1.0000        | 97.87                            |
| 86.5                           | 221,465                                      | 46                                    | 0.0002                    | 0.9998        | 97.87                            |
| 87.5                           | 211,682                                      |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 88.5                           | 208,056                                      |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 89.5                           | 204,595                                      |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 90.5                           | 200,904                                      |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 91.5                           | 192,819                                      |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 92.5                           | 189,856                                      |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 93.5                           | 184,108                                      |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 94.5                           | 178,523                                      |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 95.5                           | 176,137                                      |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 96.5                           | 175,020                                      |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 97.5                           | 174,307                                      |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 98.5                           | 173,337                                      |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 99.5                           | 170,390                                      |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 100.5                          | 168,256                                      |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 101.5                          | 158,957                                      |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 102.5                          | 152,435                                      |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 103.5                          | 148,235                                      |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 104.5                          | 146,645                                      |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 105.5                          | 144,840                                      |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 106.5                          | 143,895                                      |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 107.5                          | 138,317                                      |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 108.5                          | 133,232                                      |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 109.5                          | 128,913                                      |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 110.5                          | 123,086                                      |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 111.5                          | 109,875                                      |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 112.5                          | 101,432                                      |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 113.5                          | 85,985                                       |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 114.5                          | 78,655                                       |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 115.5                          | 63,427                                       |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 116.5                          | 55,241                                       |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 117.5                          | 54,307                                       |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 118.5                          | 52,673                                       |                                       | 0.0000                    | 1.0000        | 97.85                            |

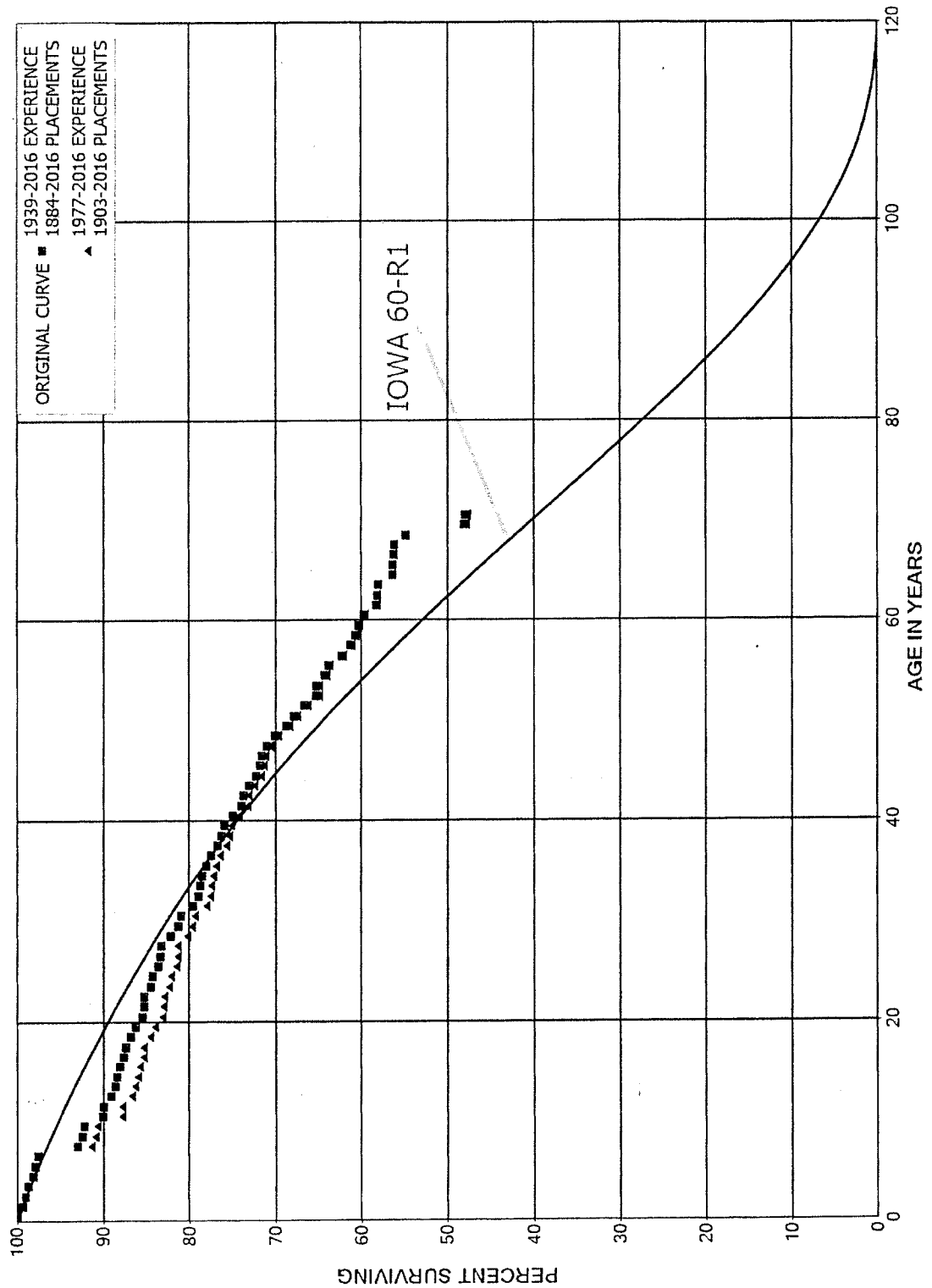
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 374.5 RIGHTS OF WAY

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1883-2006       |                                              |                                       | EXPERIENCE BAND 1939-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 119.5                          | 50,406                                       |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 120.5                          | 46,145                                       |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 121.5                          | 45,012                                       |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 122.5                          | 43,395                                       |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 123.5                          | 42,744                                       |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 124.5                          | 41,389                                       |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 125.5                          | 33,039                                       |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 126.5                          | 31,360                                       |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 127.5                          | 24,809                                       |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 128.5                          | 18,229                                       |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 129.5                          | 13,539                                       |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 130.5                          | 4,138                                        |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 131.5                          | 3,186                                        |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 132.5                          | 866                                          |                                       | 0.0000                    | 1.0000        | 97.85                            |
| 133.5                          |                                              |                                       |                           |               | 97.85                            |

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 1884-2016

EXPERIENCE BAND 1939-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 0.0                            | 5,070,416                                    | 409                                   | 0.0001         | 0.9999        | 100.00                           |
| 0.5                            | 4,800,766                                    | 34,029                                | 0.0071         | 0.9929        | 99.99                            |
| 1.5                            | 3,836,030                                    | 10,731                                | 0.0028         | 0.9972        | 99.28                            |
| 2.5                            | 3,756,555                                    | 16,457                                | 0.0044         | 0.9956        | 99.01                            |
| 3.5                            | 3,428,255                                    | 18,415                                | 0.0054         | 0.9946        | 98.57                            |
| 4.5                            | 2,824,867                                    | 5,873                                 | 0.0021         | 0.9979        | 98.04                            |
| 5.5                            | 2,623,830                                    | 8,123                                 | 0.0031         | 0.9969        | 97.84                            |
| 6.5                            | 2,522,604                                    | 119,698                               | 0.0475         | 0.9525        | 97.54                            |
| 7.5                            | 2,383,751                                    | 12,241                                | 0.0051         | 0.9949        | 92.91                            |
| 8.5                            | 1,914,683                                    | 5,118                                 | 0.0027         | 0.9973        | 92.43                            |
| 9.5                            | 1,740,604                                    | 39,886                                | 0.0229         | 0.9771        | 92.18                            |
| 10.5                           | 1,632,037                                    | 2,217                                 | 0.0014         | 0.9986        | 90.07                            |
| 11.5                           | 1,586,229                                    | 16,145                                | 0.0102         | 0.9898        | 89.95                            |
| 12.5                           | 1,549,449                                    | 7,242                                 | 0.0047         | 0.9953        | 89.03                            |
| 13.5                           | 1,489,517                                    | 4,649                                 | 0.0031         | 0.9969        | 88.62                            |
| 14.5                           | 1,459,439                                    | 4,403                                 | 0.0030         | 0.9970        | 88.34                            |
| 15.5                           | 1,433,025                                    | 7,002                                 | 0.0049         | 0.9951        | 88.07                            |
| 16.5                           | 1,396,138                                    | 3,109                                 | 0.0022         | 0.9978        | 87.64                            |
| 17.5                           | 1,404,392                                    | 9,723                                 | 0.0069         | 0.9931        | 87.45                            |
| 18.5                           | 1,362,632                                    | 9,584                                 | 0.0070         | 0.9930        | 86.84                            |
| 19.5                           | 1,332,375                                    | 10,793                                | 0.0081         | 0.9919        | 86.23                            |
| 20.5                           | 1,279,538                                    | 3,120                                 | 0.0024         | 0.9976        | 85.53                            |
| 21.5                           | 1,265,380                                    | 1,316                                 | 0.0010         | 0.9990        | 85.32                            |
| 22.5                           | 1,263,384                                    | 11,510                                | 0.0091         | 0.9909        | 85.24                            |
| 23.5                           | 1,225,762                                    | 2,651                                 | 0.0022         | 0.9978        | 84.46                            |
| 24.5                           | 1,231,422                                    | 9,623                                 | 0.0078         | 0.9922        | 84.28                            |
| 25.5                           | 1,204,452                                    | 2,501                                 | 0.0021         | 0.9979        | 83.62                            |
| 26.5                           | 1,198,744                                    | 2,876                                 | 0.0024         | 0.9976        | 83.44                            |
| 27.5                           | 1,165,379                                    | 15,338                                | 0.0132         | 0.9868        | 83.24                            |
| 28.5                           | 1,108,064                                    | 10,925                                | 0.0099         | 0.9901        | 82.15                            |
| 29.5                           | 1,086,130                                    | 5,510                                 | 0.0051         | 0.9949        | 81.34                            |
| 30.5                           | 1,061,392                                    | 17,369                                | 0.0164         | 0.9836        | 80.93                            |
| 31.5                           | 1,047,422                                    | 8,150                                 | 0.0078         | 0.9922        | 79.60                            |
| 32.5                           | 1,025,377                                    | 3,085                                 | 0.0030         | 0.9970        | 78.98                            |
| 33.5                           | 991,786                                      | 3,620                                 | 0.0037         | 0.9963        | 78.75                            |
| 34.5                           | 961,908                                      | 5,349                                 | 0.0056         | 0.9944        | 78.46                            |
| 35.5                           | 935,359                                      | 6,222                                 | 0.0067         | 0.9933        | 78.02                            |
| 36.5                           | 916,742                                      | 9,587                                 | 0.0105         | 0.9895        | 77.50                            |
| 37.5                           | 870,507                                      | 5,193                                 | 0.0060         | 0.9940        | 76.69                            |
| 38.5                           | 830,157                                      | 3,264                                 | 0.0039         | 0.9961        | 76.23                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1884-2016

EXPERIENCE BAND 1939-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 39.5                           | 805,231                                      | 10,550                                | 0.0131         | 0.9869        | 75.93                            |
| 40.5                           | 767,982                                      | 10,579                                | 0.0138         | 0.9862        | 74.94                            |
| 41.5                           | 741,196                                      | 1,616                                 | 0.0022         | 0.9978        | 73.91                            |
| 42.5                           | 727,089                                      | 7,012                                 | 0.0096         | 0.9904        | 73.75                            |
| 43.5                           | 722,307                                      | 7,912                                 | 0.0110         | 0.9890        | 73.04                            |
| 44.5                           | 703,251                                      | 3,439                                 | 0.0049         | 0.9951        | 72.24                            |
| 45.5                           | 662,918                                      | 2,780                                 | 0.0042         | 0.9958        | 71.88                            |
| 46.5                           | 652,974                                      | 5,124                                 | 0.0078         | 0.9922        | 71.58                            |
| 47.5                           | 636,363                                      | 8,151                                 | 0.0128         | 0.9872        | 71.02                            |
| 48.5                           | 620,055                                      | 12,430                                | 0.0200         | 0.9800        | 70.11                            |
| 49.5                           | 581,515                                      | 7,324                                 | 0.0126         | 0.9874        | 68.70                            |
| 50.5                           | 548,562                                      | 9,918                                 | 0.0181         | 0.9819        | 67.84                            |
| 51.5                           | 523,632                                      | 10,590                                | 0.0202         | 0.9798        | 66.61                            |
| 52.5                           | 517,252                                      | 237                                   | 0.0005         | 0.9995        | 65.26                            |
| 53.5                           | 496,824                                      | 6,838                                 | 0.0138         | 0.9862        | 65.23                            |
| 54.5                           | 479,369                                      | 3,481                                 | 0.0073         | 0.9927        | 64.34                            |
| 55.5                           | 434,873                                      | 10,702                                | 0.0246         | 0.9754        | 63.87                            |
| 56.5                           | 333,590                                      | 5,280                                 | 0.0158         | 0.9842        | 62.30                            |
| 57.5                           | 338,441                                      | 3,039                                 | 0.0090         | 0.9910        | 61.31                            |
| 58.5                           | 280,944                                      | 1,727                                 | 0.0061         | 0.9939        | 60.76                            |
| 59.5                           | 200,153                                      | 2,187                                 | 0.0109         | 0.9891        | 60.39                            |
| 60.5                           | 157,973                                      | 3,795                                 | 0.0240         | 0.9760        | 59.73                            |
| 61.5                           | 144,348                                      | 202                                   | 0.0014         | 0.9986        | 58.29                            |
| 62.5                           | 138,237                                      | 391                                   | 0.0028         | 0.9972        | 58.21                            |
| 63.5                           | 108,918                                      | 3,094                                 | 0.0284         | 0.9716        | 58.05                            |
| 64.5                           | 73,123                                       | 58                                    | 0.0008         | 0.9992        | 56.40                            |
| 65.5                           | 60,633                                       | 120                                   | 0.0020         | 0.9980        | 56.35                            |
| 66.5                           | 55,470                                       | 69                                    | 0.0012         | 0.9988        | 56.24                            |
| 67.5                           | 54,245                                       | 1,262                                 | 0.0233         | 0.9767        | 56.17                            |
| 68.5                           | 46,267                                       | 5,725                                 | 0.1237         | 0.8763        | 54.86                            |
| 69.5                           | 37,809                                       | 107                                   | 0.0028         | 0.9972        | 48.08                            |
| 70.5                           | 36,678                                       | 419                                   | 0.0114         | 0.9886        | 47.94                            |
| 71.5                           | 35,620                                       | 266                                   | 0.0075         | 0.9925        | 47.39                            |
| 72.5                           | 35,291                                       | 336                                   | 0.0095         | 0.9905        | 47.04                            |
| 73.5                           | 34,260                                       | 314                                   | 0.0092         | 0.9908        | 46.59                            |
| 74.5                           | 31,602                                       | 609                                   | 0.0193         | 0.9807        | 46.16                            |
| 75.5                           | 33,253                                       |                                       | 0.0000         | 1.0000        | 45.28                            |
| 76.5                           | 32,699                                       |                                       | 0.0000         | 1.0000        | 45.28                            |
| 77.5                           | 24,863                                       |                                       | 0.0000         | 1.0000        | 45.28                            |
| 78.5                           | 24,695                                       | 460                                   | 0.0186         | 0.9814        | 45.28                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1884-2016       |                                              |                                       | EXPERIENCE BAND 1939-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 79.5                           | 24,235                                       | 501                                   | 0.0207                    | 0.9793        | 44.43                            |
| 80.5                           | 22,226                                       | 334                                   | 0.0150                    | 0.9850        | 43.51                            |
| 81.5                           | 24,304                                       | 250                                   | 0.0103                    | 0.9897        | 42.86                            |
| 82.5                           | 22,011                                       | 272                                   | 0.0124                    | 0.9876        | 42.42                            |
| 83.5                           | 16,464                                       | 297                                   | 0.0180                    | 0.9820        | 41.89                            |
| 84.5                           | 13,846                                       | 61                                    | 0.0044                    | 0.9956        | 41.14                            |
| 85.5                           | 12,551                                       |                                       | 0.0000                    | 1.0000        | 40.96                            |
| 86.5                           | 7,735                                        |                                       | 0.0000                    | 1.0000        | 40.96                            |
| 87.5                           | 3,194                                        |                                       | 0.0000                    | 1.0000        | 40.96                            |
| 88.5                           | 2,631                                        |                                       | 0.0000                    | 1.0000        | 40.96                            |
| 89.5                           | 2,405                                        | 717                                   | 0.2980                    | 0.7020        | 40.96                            |
| 90.5                           | 1,689                                        |                                       | 0.0000                    | 1.0000        | 28.75                            |
| 91.5                           | 1,477                                        | 105                                   | 0.0708                    | 0.9292        | 28.75                            |
| 92.5                           | 1,372                                        |                                       | 0.0000                    | 1.0000        | 26.72                            |
| 93.5                           | 1,372                                        | 350                                   | 0.2551                    | 0.7449        | 26.72                            |
| 94.5                           | 1,022                                        |                                       | 0.0000                    | 1.0000        | 19.90                            |
| 95.5                           | 1,022                                        |                                       | 0.0000                    | 1.0000        | 19.90                            |
| 96.5                           | 1,022                                        |                                       | 0.0000                    | 1.0000        | 19.90                            |
| 97.5                           | 1,022                                        |                                       | 0.0000                    | 1.0000        | 19.90                            |
| 98.5                           | 1,022                                        |                                       | 0.0000                    | 1.0000        | 19.90                            |
| 99.5                           | 1,022                                        |                                       | 0.0000                    | 1.0000        | 19.90                            |
| 100.5                          | 978                                          |                                       | 0.0000                    | 1.0000        | 19.90                            |
| 101.5                          | 978                                          |                                       | 0.0000                    | 1.0000        | 19.90                            |
| 102.5                          | 542                                          | 23                                    | 0.0417                    | 0.9583        | 19.90                            |
| 103.5                          | 88                                           |                                       | 0.0000                    | 1.0000        | 19.07                            |
| 104.5                          | 88                                           |                                       | 0.0000                    | 1.0000        | 19.07                            |
| 105.5                          | 88                                           |                                       | 0.0000                    | 1.0000        | 19.07                            |
| 106.5                          | 88                                           |                                       | 0.0000                    | 1.0000        | 19.07                            |
| 107.5                          | 88                                           |                                       | 0.0000                    | 1.0000        | 19.07                            |
| 108.5                          | 88                                           |                                       | 0.0000                    | 1.0000        | 19.07                            |
| 109.5                          | 88                                           |                                       | 0.0000                    | 1.0000        | 19.07                            |
| 110.5                          | 88                                           |                                       | 0.0000                    | 1.0000        | 19.07                            |
| 111.5                          |                                              |                                       |                           |               | 19.07                            |



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

ORIGINAL LIFE TABLE

PLACEMENT BAND 1903-2016

EXPERIENCE BAND 1977-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 0.0                            | 4,308,987                                    |                                       | 0.0000         | 1.0000        | 100.00                           |
| 0.5                            | 4,065,832                                    | 33,176                                | 0.0082         | 0.9918        | 100.00                           |
| 1.5                            | 3,115,971                                    | 9,131                                 | 0.0029         | 0.9971        | 99.18                            |
| 2.5                            | 3,050,536                                    | 15,673                                | 0.0051         | 0.9949        | 98.89                            |
| 3.5                            | 2,752,732                                    | 14,852                                | 0.0054         | 0.9946        | 98.39                            |
| 4.5                            | 2,168,610                                    | 5,094                                 | 0.0023         | 0.9977        | 97.85                            |
| 5.5                            | 1,977,367                                    | 4,728                                 | 0.0024         | 0.9976        | 97.62                            |
| 6.5                            | 1,863,102                                    | 118,781                               | 0.0638         | 0.9362        | 97.39                            |
| 7.5                            | 1,730,801                                    | 9,604                                 | 0.0055         | 0.9945        | 91.18                            |
| 8.5                            | 1,268,390                                    | 1,761                                 | 0.0014         | 0.9986        | 90.68                            |
| 9.5                            | 1,100,931                                    | 36,072                                | 0.0328         | 0.9672        | 90.55                            |
| 10.5                           | 1,019,519                                    |                                       | 0.0000         | 1.0000        | 87.58                            |
| 11.5                           | 1,000,090                                    | 12,285                                | 0.0123         | 0.9877        | 87.58                            |
| 12.5                           | 1,022,616                                    | 4,263                                 | 0.0042         | 0.9958        | 86.51                            |
| 13.5                           | 995,187                                      | 3,678                                 | 0.0037         | 0.9963        | 86.15                            |
| 14.5                           | 1,014,701                                    | 1,990                                 | 0.0020         | 0.9980        | 85.83                            |
| 15.5                           | 1,027,160                                    | 5,182                                 | 0.0050         | 0.9950        | 85.66                            |
| 16.5                           | 1,029,863                                    | 1,262                                 | 0.0012         | 0.9988        | 85.23                            |
| 17.5                           | 1,068,530                                    | 8,983                                 | 0.0084         | 0.9916        | 85.12                            |
| 18.5                           | 1,094,201                                    | 8,028                                 | 0.0073         | 0.9927        | 84.41                            |
| 19.5                           | 1,104,709                                    | 10,466                                | 0.0095         | 0.9905        | 83.79                            |
| 20.5                           | 1,076,819                                    | 2,655                                 | 0.0025         | 0.9975        | 82.99                            |
| 21.5                           | 1,080,649                                    | 401                                   | 0.0004         | 0.9996        | 82.79                            |
| 22.5                           | 1,107,769                                    | 7,860                                 | 0.0071         | 0.9929        | 82.76                            |
| 23.5                           | 1,104,635                                    | 2,270                                 | 0.0021         | 0.9979        | 82.17                            |
| 24.5                           | 1,132,017                                    | 9,242                                 | 0.0082         | 0.9918        | 82.00                            |
| 25.5                           | 1,117,058                                    | 1,475                                 | 0.0013         | 0.9987        | 81.33                            |
| 26.5                           | 1,114,540                                    | 1,119                                 | 0.0010         | 0.9990        | 81.23                            |
| 27.5                           | 1,086,473                                    | 14,280                                | 0.0131         | 0.9869        | 81.15                            |
| 28.5                           | 1,036,622                                    | 7,581                                 | 0.0073         | 0.9927        | 80.08                            |
| 29.5                           | 1,020,687                                    | 4,497                                 | 0.0044         | 0.9956        | 79.49                            |
| 30.5                           | 997,746                                      | 15,870                                | 0.0159         | 0.9841        | 79.14                            |
| 31.5                           | 984,456                                      | 6,752                                 | 0.0069         | 0.9931        | 77.88                            |
| 32.5                           | 960,964                                      | 1,395                                 | 0.0015         | 0.9985        | 77.35                            |
| 33.5                           | 932,060                                      | 1,647                                 | 0.0018         | 0.9982        | 77.24                            |
| 34.5                           | 904,491                                      | 4,036                                 | 0.0045         | 0.9955        | 77.10                            |
| 35.5                           | 878,218                                      | 5,600                                 | 0.0064         | 0.9936        | 76.76                            |
| 36.5                           | 860,084                                      | 8,165                                 | 0.0095         | 0.9905        | 76.27                            |
| 37.5                           | 819,989                                      | 4,148                                 | 0.0051         | 0.9949        | 75.54                            |
| 38.5                           | 781,043                                      | 1,774                                 | 0.0023         | 0.9977        | 75.16                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1903-2016

EXPERIENCE BAND 1977-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 39.5                           | 757,550                                      | 9,842                                 | 0.0130         | 0.9870        | 74.99                            |
| 40.5                           | 723,795                                      | 9,562                                 | 0.0132         | 0.9868        | 74.02                            |
| 41.5                           | 698,337                                      | 981                                   | 0.0014         | 0.9986        | 73.04                            |
| 42.5                           | 686,569                                      | 6,499                                 | 0.0095         | 0.9905        | 72.94                            |
| 43.5                           | 686,894                                      | 6,883                                 | 0.0100         | 0.9900        | 72.25                            |
| 44.5                           | 671,602                                      | 3,098                                 | 0.0046         | 0.9954        | 71.52                            |
| 45.5                           | 635,521                                      | 2,422                                 | 0.0038         | 0.9962        | 71.19                            |
| 46.5                           | 631,732                                      | 4,558                                 | 0.0072         | 0.9928        | 70.92                            |
| 47.5                           | 626,809                                      | 7,940                                 | 0.0127         | 0.9873        | 70.41                            |
| 48.5                           | 611,021                                      | 12,172                                | 0.0199         | 0.9801        | 69.52                            |
| 49.5                           | 573,574                                      | 6,964                                 | 0.0121         | 0.9879        | 68.13                            |
| 50.5                           | 541,723                                      | 9,901                                 | 0.0183         | 0.9817        | 67.30                            |
| 51.5                           | 516,732                                      | 10,534                                | 0.0204         | 0.9796        | 66.07                            |
| 52.5                           | 510,531                                      | 171                                   | 0.0003         | 0.9997        | 64.73                            |
| 53.5                           | 490,174                                      | 6,377                                 | 0.0130         | 0.9870        | 64.71                            |
| 54.5                           | 473,368                                      | 2,920                                 | 0.0062         | 0.9938        | 63.86                            |
| 55.5                           | 429,509                                      | 10,597                                | 0.0247         | 0.9753        | 63.47                            |
| 56.5                           | 328,451                                      | 4,849                                 | 0.0148         | 0.9852        | 61.90                            |
| 57.5                           | 333,932                                      | 2,953                                 | 0.0088         | 0.9912        | 60.99                            |
| 58.5                           | 276,992                                      | 1,648                                 | 0.0059         | 0.9941        | 60.45                            |
| 59.5                           | 196,281                                      | 2,124                                 | 0.0108         | 0.9892        | 60.09                            |
| 60.5                           | 154,228                                      | 3,493                                 | 0.0226         | 0.9774        | 59.44                            |
| 61.5                           | 140,905                                      | 202                                   | 0.0014         | 0.9986        | 58.09                            |
| 62.5                           | 135,230                                      | 265                                   | 0.0020         | 0.9980        | 58.01                            |
| 63.5                           | 106,468                                      | 3,053                                 | 0.0287         | 0.9713        | 57.90                            |
| 64.5                           | 70,756                                       | 3                                     | 0.0000         | 1.0000        | 56.24                            |
| 65.5                           | 58,420                                       | 120                                   | 0.0021         | 0.9979        | 56.24                            |
| 66.5                           | 53,258                                       | 69                                    | 0.0013         | 0.9987        | 56.12                            |
| 67.5                           | 52,032                                       | 1,262                                 | 0.0243         | 0.9757        | 56.05                            |
| 68.5                           | 44,159                                       | 5,725                                 | 0.1296         | 0.8704        | 54.69                            |
| 69.5                           | 35,664                                       | 77                                    | 0.0022         | 0.9978        | 47.60                            |
| 70.5                           | 34,562                                       | 419                                   | 0.0121         | 0.9879        | 47.49                            |
| 71.5                           | 33,655                                       | 266                                   | 0.0079         | 0.9921        | 46.92                            |
| 72.5                           | 33,349                                       | 336                                   | 0.0101         | 0.9899        | 46.55                            |
| 73.5                           | 33,376                                       | 277                                   | 0.0083         | 0.9917        | 46.08                            |
| 74.5                           | 30,755                                       | 58                                    | 0.0019         | 0.9981        | 45.70                            |
| 75.5                           | 32,956                                       |                                       | 0.0000         | 1.0000        | 45.61                            |
| 76.5                           | 32,402                                       |                                       | 0.0000         | 1.0000        | 45.61                            |
| 77.5                           | 24,566                                       |                                       | 0.0000         | 1.0000        | 45.61                            |
| 78.5                           | 24,398                                       | 460                                   | 0.0188         | 0.9812        | 45.61                            |

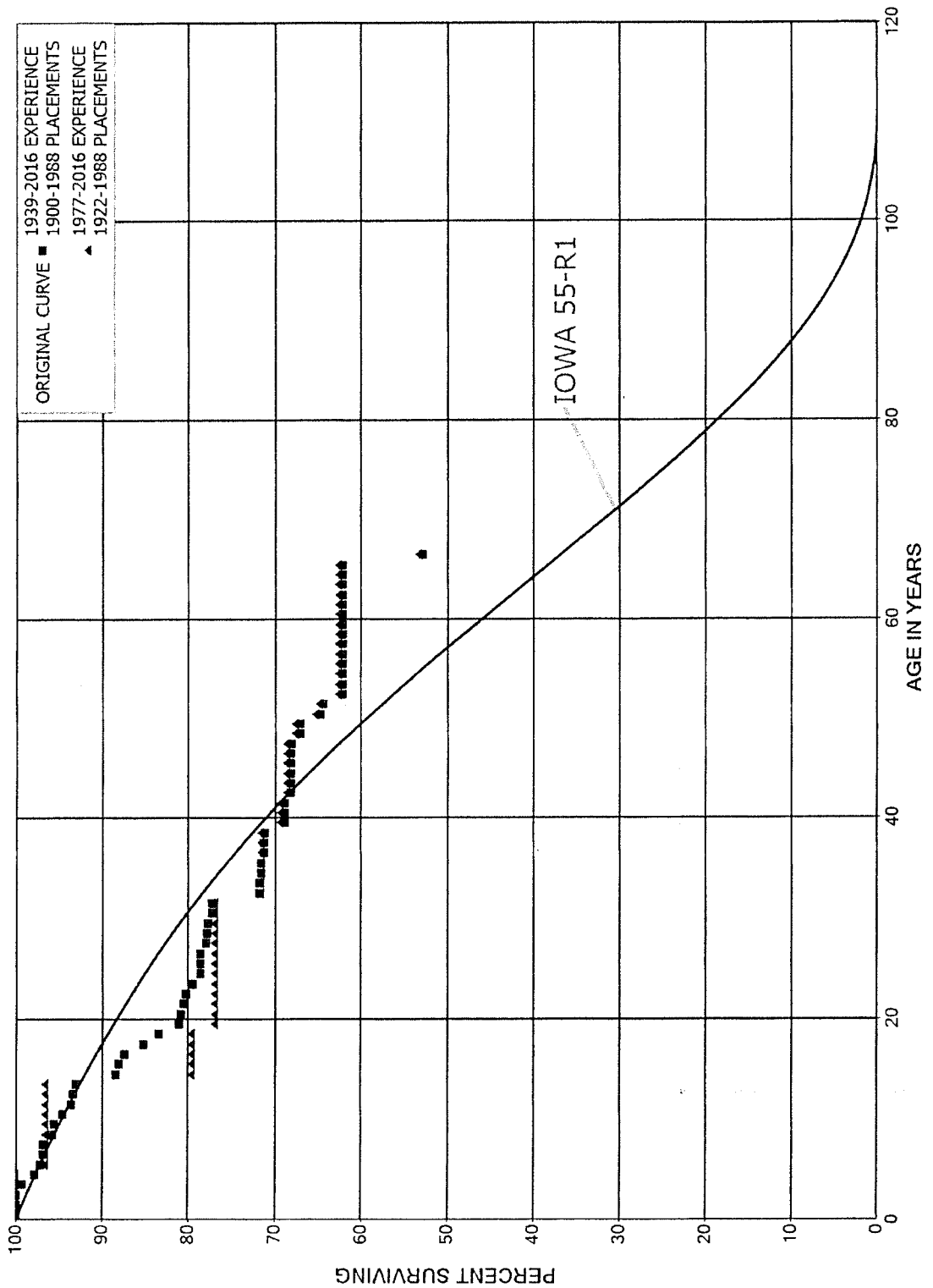
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1903-2016       |                                              |                                       | EXPERIENCE BAND 1977-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 79.5                           | 23,938                                       | 501                                   | 0.0209                    | 0.9791        | 44.75                            |
| 80.5                           | 21,929                                       | 334                                   | 0.0152                    | 0.9848        | 43.81                            |
| 81.5                           | 24,007                                       | 250                                   | 0.0104                    | 0.9896        | 43.15                            |
| 82.5                           | 21,713                                       | 272                                   | 0.0125                    | 0.9875        | 42.70                            |
| 83.5                           | 16,167                                       |                                       | 0.0000                    | 1.0000        | 42.16                            |
| 84.5                           | 13,846                                       | 61                                    | 0.0044                    | 0.9956        | 42.16                            |
| 85.5                           | 12,551                                       |                                       | 0.0000                    | 1.0000        | 41.97                            |
| 86.5                           | 7,735                                        |                                       | 0.0000                    | 1.0000        | 41.97                            |
| 87.5                           | 3,194                                        |                                       | 0.0000                    | 1.0000        | 41.97                            |
| 88.5                           | 2,631                                        |                                       | 0.0000                    | 1.0000        | 41.97                            |
| 89.5                           | 2,405                                        | 717                                   | 0.2980                    | 0.7020        | 41.97                            |
| 90.5                           | 1,689                                        |                                       | 0.0000                    | 1.0000        | 29.47                            |
| 91.5                           | 1,477                                        | 105                                   | 0.0708                    | 0.9292        | 29.47                            |
| 92.5                           | 1,372                                        |                                       | 0.0000                    | 1.0000        | 27.38                            |
| 93.5                           | 1,372                                        | 350                                   | 0.2551                    | 0.7449        | 27.38                            |
| 94.5                           | 1,022                                        |                                       | 0.0000                    | 1.0000        | 20.40                            |
| 95.5                           | 1,022                                        |                                       | 0.0000                    | 1.0000        | 20.40                            |
| 96.5                           | 1,022                                        |                                       | 0.0000                    | 1.0000        | 20.40                            |
| 97.5                           | 1,022                                        |                                       | 0.0000                    | 1.0000        | 20.40                            |
| 98.5                           | 1,022                                        |                                       | 0.0000                    | 1.0000        | 20.40                            |
| 99.5                           | 1,022                                        |                                       | 0.0000                    | 1.0000        | 20.40                            |
| 100.5                          | 978                                          |                                       | 0.0000                    | 1.0000        | 20.40                            |
| 101.5                          | 978                                          |                                       | 0.0000                    | 1.0000        | 20.40                            |
| 102.5                          | 542                                          | 23                                    | 0.0417                    | 0.9583        | 20.40                            |
| 103.5                          | 88                                           |                                       | 0.0000                    | 1.0000        | 19.55                            |
| 104.5                          | 88                                           |                                       | 0.0000                    | 1.0000        | 19.55                            |
| 105.5                          | 88                                           |                                       | 0.0000                    | 1.0000        | 19.55                            |
| 106.5                          | 88                                           |                                       | 0.0000                    | 1.0000        | 19.55                            |
| 107.5                          | 88                                           |                                       | 0.0000                    | 1.0000        | 19.55                            |
| 108.5                          | 88                                           |                                       | 0.0000                    | 1.0000        | 19.55                            |
| 109.5                          | 88                                           |                                       | 0.0000                    | 1.0000        | 19.55                            |
| 110.5                          | 88                                           |                                       | 0.0000                    | 1.0000        | 19.55                            |
| 111.5                          |                                              |                                       |                           |               | 19.55                            |

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 1939-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETM<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>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                           | 111,901                                      | 1,159                                 | 0.0104        | 0.9896        | 79.48                            |
| 24.5                           | 110,981                                      |                                       | 0.0000        | 1.0000        | 78.66                            |
| 25.5                           | 110,612                                      | 127                                   | 0.0011        | 0.9989        | 78.66                            |
| 26.5                           | 110,550                                      | 895                                   | 0.0081        | 0.9919        | 78.57                            |
| 27.5                           | 109,221                                      | 114                                   | 0.0010        | 0.9990        | 77.93                            |
| 28.5                           | 97,376                                       | 127                                   | 0.0013        | 0.9987        | 77.85                            |
| 29.5                           | 96,347                                       | 521                                   | 0.0054        | 0.9946        | 77.75                            |
| 30.5                           | 95,701                                       | 125                                   | 0.0013        | 0.9987        | 77.33                            |
| 31.5                           | 95,746                                       | 6,639                                 | 0.0693        | 0.9307        | 77.23                            |
| 32.5                           | 89,801                                       |                                       | 0.0000        | 1.0000        | 71.87                            |
| 33.5                           | 89,826                                       | 300                                   | 0.0033        | 0.9967        | 71.87                            |
| 34.5                           | 89,438                                       |                                       | 0.0000        | 1.0000        | 71.63                            |
| 35.5                           | 89,568                                       | 395                                   | 0.0044        | 0.9956        | 71.63                            |
| 36.5                           | 84,471                                       |                                       | 0.0000        | 1.0000        | 71.32                            |
| 37.5                           | 84,437                                       | 136                                   | 0.0016        | 0.9984        | 71.32                            |
| 38.5                           | 84,316                                       | 2,831                                 | 0.0336        | 0.9664        | 71.20                            |

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 1939-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 39.5                           | 80,816                                       |                                       | 0.0000                    | 1.0000        | 68.81                            |
| 40.5                           | 80,816                                       |                                       | 0.0000                    | 1.0000        | 68.81                            |
| 41.5                           | 80,816                                       | 814                                   | 0.0101                    | 0.9899        | 68.81                            |
| 42.5                           | 80,003                                       |                                       | 0.0000                    | 1.0000        | 68.12                            |
| 43.5                           | 80,003                                       |                                       | 0.0000                    | 1.0000        | 68.12                            |
| 44.5                           | 80,002                                       |                                       | 0.0000                    | 1.0000        | 68.12                            |
| 45.5                           | 72,280                                       |                                       | 0.0000                    | 1.0000        | 68.12                            |
| 46.5                           | 69,830                                       | 25                                    | 0.0004                    | 0.9996        | 68.12                            |
| 47.5                           | 69,805                                       | 1,034                                 | 0.0148                    | 0.9852        | 68.10                            |
| 48.5                           | 68,771                                       |                                       | 0.0000                    | 1.0000        | 67.09                            |
| 49.5                           | 67,157                                       | 2,347                                 | 0.0349                    | 0.9651        | 67.09                            |
| 50.5                           | 64,810                                       | 386                                   | 0.0060                    | 0.9940        | 64.74                            |
| 51.5                           | 64,399                                       | 2,235                                 | 0.0347                    | 0.9653        | 64.36                            |
| 52.5                           | 60,723                                       |                                       | 0.0000                    | 1.0000        | 62.12                            |
| 53.5                           | 57,306                                       |                                       | 0.0000                    | 1.0000        | 62.12                            |
| 54.5                           | 57,306                                       |                                       | 0.0000                    | 1.0000        | 62.12                            |
| 55.5                           | 55,336                                       |                                       | 0.0000                    | 1.0000        | 62.12                            |
| 56.5                           | 53,991                                       |                                       | 0.0000                    | 1.0000        | 62.12                            |
| 57.5                           | 48,088                                       |                                       | 0.0000                    | 1.0000        | 62.12                            |
| 58.5                           | 46,421                                       |                                       | 0.0000                    | 1.0000        | 62.12                            |
| 59.5                           | 32,045                                       |                                       | 0.0000                    | 1.0000        | 62.12                            |
| 60.5                           | 29,537                                       |                                       | 0.0000                    | 1.0000        | 62.12                            |
| 61.5                           | 24,633                                       |                                       | 0.0000                    | 1.0000        | 62.12                            |
| 62.5                           | 24,633                                       |                                       | 0.0000                    | 1.0000        | 62.12                            |
| 63.5                           | 20,373                                       |                                       | 0.0000                    | 1.0000        | 62.12                            |
| 64.5                           | 16,404                                       |                                       | 0.0000                    | 1.0000        | 62.12                            |
| 65.5                           | 13,272                                       | 1,985                                 | 0.1496                    | 0.8504        | 62.12                            |
| 66.5                           | 9,429                                        |                                       | 0.0000                    | 1.0000        | 52.83                            |
| 67.5                           | 9,429                                        |                                       | 0.0000                    | 1.0000        | 52.83                            |
| 68.5                           | 8,946                                        |                                       | 0.0000                    | 1.0000        | 52.83                            |
| 69.5                           | 8,378                                        |                                       | 0.0000                    | 1.0000        | 52.83                            |
| 70.5                           | 8,000                                        |                                       | 0.0000                    | 1.0000        | 52.83                            |
| 71.5                           | 8,000                                        | 43                                    | 0.0053                    | 0.9947        | 52.83                            |
| 72.5                           | 5,107                                        |                                       | 0.0000                    | 1.0000        | 52.55                            |
| 73.5                           | 5,107                                        |                                       | 0.0000                    | 1.0000        | 52.55                            |
| 74.5                           | 4,089                                        |                                       | 0.0000                    | 1.0000        | 52.55                            |
| 75.5                           | 4,089                                        |                                       | 0.0000                    | 1.0000        | 52.55                            |
| 76.5                           | 3,649                                        |                                       | 0.0000                    | 1.0000        | 52.55                            |
| 77.5                           | 3,649                                        |                                       | 0.0000                    | 1.0000        | 52.55                            |
| 78.5                           | 2,186                                        |                                       | 0.0000                    | 1.0000        | 52.55                            |

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 1939-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 79.5                           | 1,567                                        |                                       | 0.0000                    | 1.0000        | 52.55                            |
| 80.5                           | 1,546                                        |                                       | 0.0000                    | 1.0000        | 52.55                            |
| 81.5                           | 1,399                                        |                                       | 0.0000                    | 1.0000        | 52.55                            |
| 82.5                           | 615                                          | 22                                    | 0.0364                    | 0.9636        | 52.55                            |
| 83.5                           | 592                                          |                                       | 0.0000                    | 1.0000        | 50.64                            |
| 84.5                           | 592                                          |                                       | 0.0000                    | 1.0000        | 50.64                            |
| 85.5                           | 329                                          |                                       | 0.0000                    | 1.0000        | 50.64                            |
| 86.5                           | 201                                          |                                       | 0.0000                    | 1.0000        | 50.64                            |
| 87.5                           | 201                                          |                                       | 0.0000                    | 1.0000        | 50.64                            |
| 88.5                           | 114                                          |                                       | 0.0000                    | 1.0000        | 50.64                            |
| 89.5                           | 114                                          |                                       | 0.0000                    | 1.0000        | 50.64                            |
| 90.5                           | 114                                          |                                       | 0.0000                    | 1.0000        | 50.64                            |
| 91.5                           | 114                                          |                                       | 0.0000                    | 1.0000        | 50.64                            |
| 92.5                           | 114                                          |                                       | 0.0000                    | 1.0000        | 50.64                            |
| 93.5                           | 114                                          |                                       | 0.0000                    | 1.0000        | 50.64                            |
| 94.5                           |                                              |                                       |                           |               | 50.64                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.6 STRUCTURES AND IMPROVEMENTS - INDUSTRIAL MEASURING AND  
REGULATING

ORIGINAL LIFE TABLE

| PLACEMENT BAND 1922-1988       |                                              |                                       | EXPERIENCE BAND 1977-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>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                           | 77,629                                       |                                       | 0.0000                    | 1.0000        | 76.78                            |
| 24.5                           | 82,325                                       |                                       | 0.0000                    | 1.0000        | 76.78                            |
| 25.5                           | 89,968                                       |                                       | 0.0000                    | 1.0000        | 76.78                            |
| 26.5                           | 91,826                                       |                                       | 0.0000                    | 1.0000        | 76.78                            |
| 27.5                           | 91,826                                       |                                       | 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                           | 81,356                                       | 5,591                                 | 0.0687                    | 0.9313        | 76.78                            |
| 32.5                           | 80,347                                       |                                       | 0.0000                    | 1.0000        | 71.51                            |
| 33.5                           | 80,347                                       |                                       | 0.0000                    | 1.0000        | 71.51                            |
| 34.5                           | 83,130                                       |                                       | 0.0000                    | 1.0000        | 71.51                            |
| 35.5                           | 83,130                                       |                                       | 0.0000                    | 1.0000        | 71.51                            |
| 36.5                           | 78,843                                       |                                       | 0.0000                    | 1.0000        | 71.51                            |
| 37.5                           | 78,843                                       |                                       | 0.0000                    | 1.0000        | 71.51                            |
| 38.5                           | 80,348                                       | 2,533                                 | 0.0315                    | 0.9685        | 71.51                            |



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 1977-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 39.5                           | 77,765                                       |                                       | 0.0000         | 1.0000        | 69.25                            |
| 40.5                           | 77,787                                       |                                       | 0.0000         | 1.0000        | 69.25                            |
| 41.5                           | 77,934                                       | 814                                   | 0.0104         | 0.9896        | 69.25                            |
| 42.5                           | 77,904                                       |                                       | 0.0000         | 1.0000        | 68.53                            |
| 43.5                           | 78,926                                       |                                       | 0.0000         | 1.0000        | 68.53                            |
| 44.5                           | 78,925                                       |                                       | 0.0000         | 1.0000        | 68.53                            |
| 45.5                           | 71,467                                       |                                       | 0.0000         | 1.0000        | 68.53                            |
| 46.5                           | 69,175                                       |                                       | 0.0000         | 1.0000        | 68.53                            |
| 47.5                           | 69,198                                       | 1,022                                 | 0.0148         | 0.9852        | 68.53                            |
| 48.5                           | 68,618                                       |                                       | 0.0000         | 1.0000        | 67.52                            |
| 49.5                           | 67,003                                       | 2,347                                 | 0.0350         | 0.9650        | 67.52                            |
| 50.5                           | 64,656                                       | 386                                   | 0.0060         | 0.9940        | 65.15                            |
| 51.5                           | 64,270                                       | 2,235                                 | 0.0348         | 0.9652        | 64.76                            |
| 52.5                           | 60,594                                       |                                       | 0.0000         | 1.0000        | 62.51                            |
| 53.5                           | 57,177                                       |                                       | 0.0000         | 1.0000        | 62.51                            |
| 54.5                           | 57,291                                       |                                       | 0.0000         | 1.0000        | 62.51                            |
| 55.5                           | 55,336                                       |                                       | 0.0000         | 1.0000        | 62.51                            |
| 56.5                           | 53,991                                       |                                       | 0.0000         | 1.0000        | 62.51                            |
| 57.5                           | 48,088                                       |                                       | 0.0000         | 1.0000        | 62.51                            |
| 58.5                           | 46,421                                       |                                       | 0.0000         | 1.0000        | 62.51                            |
| 59.5                           | 32,045                                       |                                       | 0.0000         | 1.0000        | 62.51                            |
| 60.5                           | 29,537                                       |                                       | 0.0000         | 1.0000        | 62.51                            |
| 61.5                           | 24,633                                       |                                       | 0.0000         | 1.0000        | 62.51                            |
| 62.5                           | 24,633                                       |                                       | 0.0000         | 1.0000        | 62.51                            |
| 63.5                           | 20,373                                       |                                       | 0.0000         | 1.0000        | 62.51                            |
| 64.5                           | 16,404                                       |                                       | 0.0000         | 1.0000        | 62.51                            |
| 65.5                           | 13,272                                       | 1,985                                 | 0.1496         | 0.8504        | 62.51                            |
| 66.5                           | 9,429                                        |                                       | 0.0000         | 1.0000        | 53.16                            |
| 67.5                           | 9,429                                        |                                       | 0.0000         | 1.0000        | 53.16                            |
| 68.5                           | 8,946                                        |                                       | 0.0000         | 1.0000        | 53.16                            |
| 69.5                           | 8,378                                        |                                       | 0.0000         | 1.0000        | 53.16                            |
| 70.5                           | 8,000                                        |                                       | 0.0000         | 1.0000        | 53.16                            |
| 71.5                           | 8,000                                        | 43                                    | 0.0053         | 0.9947        | 53.16                            |
| 72.5                           | 5,107                                        |                                       | 0.0000         | 1.0000        | 52.88                            |
| 73.5                           | 5,107                                        |                                       | 0.0000         | 1.0000        | 52.88                            |
| 74.5                           | 4,089                                        |                                       | 0.0000         | 1.0000        | 52.88                            |
| 75.5                           | 4,089                                        |                                       | 0.0000         | 1.0000        | 52.88                            |
| 76.5                           | 3,649                                        |                                       | 0.0000         | 1.0000        | 52.88                            |
| 77.5                           | 3,649                                        |                                       | 0.0000         | 1.0000        | 52.88                            |
| 78.5                           | 2,186                                        |                                       | 0.0000         | 1.0000        | 52.88                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.6 STRUCTURES AND IMPROVEMENTS - INDUSTRIAL MEASURING AND  
REGULATING

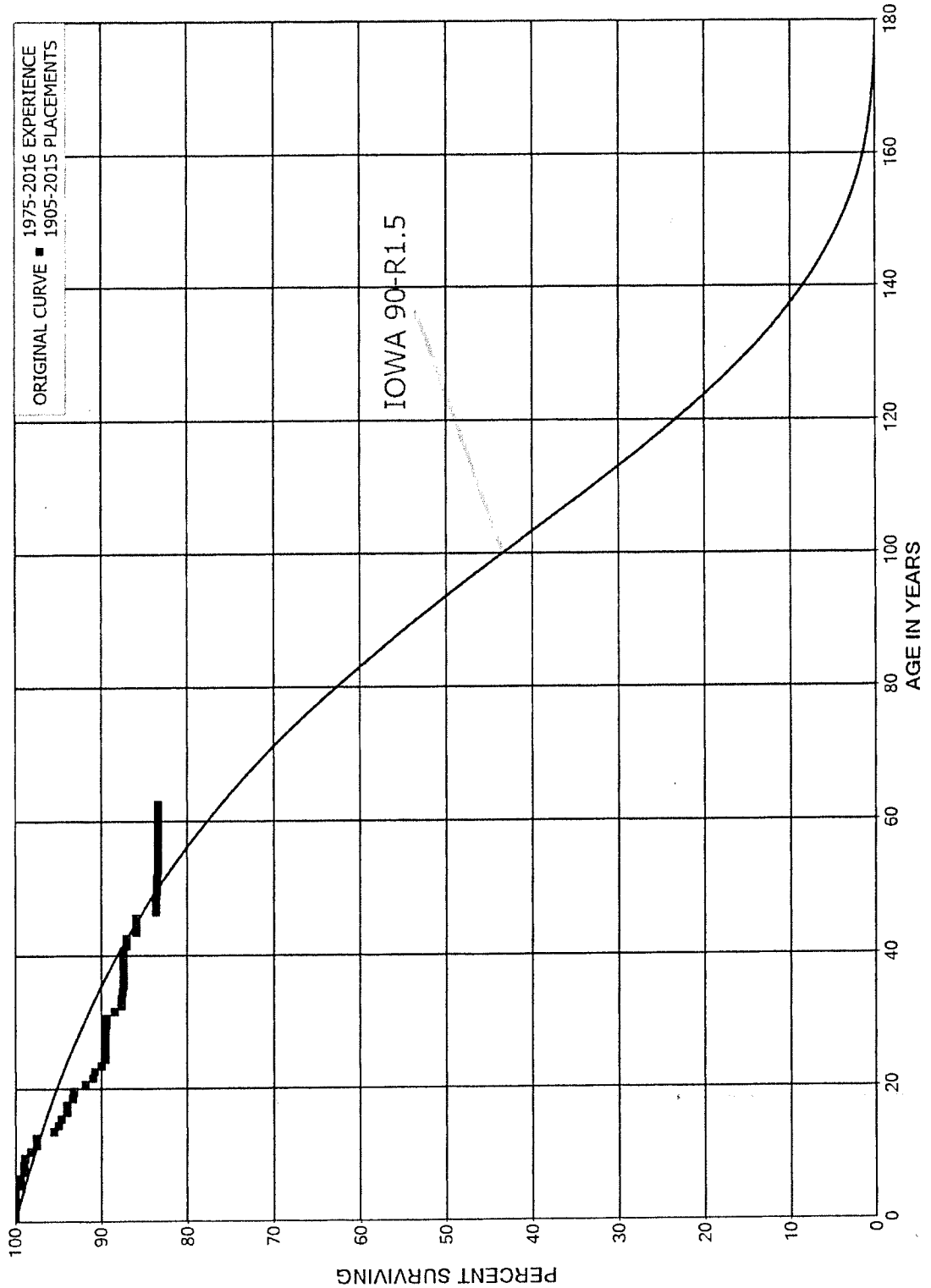
ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1922-1988

EXPERIENCE BAND 1977-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 79.5                           | 1,567                                        |                                       | 0.0000         | 1.0000        | 52.88                            |
| 80.5                           | 1,546                                        |                                       | 0.0000         | 1.0000        | 52.88                            |
| 81.5                           | 1,399                                        |                                       | 0.0000         | 1.0000        | 52.88                            |
| 82.5                           | 615                                          | 22                                    | 0.0364         | 0.9636        | 52.88                            |
| 83.5                           | 592                                          |                                       | 0.0000         | 1.0000        | 50.95                            |
| 84.5                           | 592                                          |                                       | 0.0000         | 1.0000        | 50.95                            |
| 85.5                           | 329                                          |                                       | 0.0000         | 1.0000        | 50.95                            |
| 86.5                           | 201                                          |                                       | 0.0000         | 1.0000        | 50.95                            |
| 87.5                           | 201                                          |                                       | 0.0000         | 1.0000        | 50.95                            |
| 88.5                           | 114                                          |                                       | 0.0000         | 1.0000        | 50.95                            |
| 89.5                           | 114                                          |                                       | 0.0000         | 1.0000        | 50.95                            |
| 90.5                           | 114                                          |                                       | 0.0000         | 1.0000        | 50.95                            |
| 91.5                           | 114                                          |                                       | 0.0000         | 1.0000        | 50.95                            |
| 92.5                           | 114                                          |                                       | 0.0000         | 1.0000        | 50.95                            |
| 93.5                           | 114                                          |                                       | 0.0000         | 1.0000        | 50.95                            |
| 94.5                           |                                              |                                       |                |               | 50.95                            |

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 1905-2015

EXPERIENCE BAND 1975-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 0.0                            | 5,252,842                                    |                                       | 0.0000         | 1.0000        | 100.00                           |
| 0.5                            | 5,267,845                                    |                                       | 0.0000         | 1.0000        | 100.00                           |
| 1.5                            | 4,079,138                                    |                                       | 0.0000         | 1.0000        | 100.00                           |
| 2.5                            | 4,099,020                                    |                                       | 0.0000         | 1.0000        | 100.00                           |
| 3.5                            | 4,260,235                                    |                                       | 0.0000         | 1.0000        | 100.00                           |
| 4.5                            | 4,391,637                                    | 23,416                                | 0.0053         | 0.9947        | 100.00                           |
| 5.5                            | 4,270,508                                    | 3,948                                 | 0.0009         | 0.9991        | 99.47                            |
| 6.5                            | 4,200,611                                    | 16,625                                | 0.0040         | 0.9960        | 99.37                            |
| 7.5                            | 4,097,081                                    | 3,734                                 | 0.0009         | 0.9991        | 98.98                            |
| 8.5                            | 4,041,671                                    | 3,360                                 | 0.0008         | 0.9992        | 98.89                            |
| 9.5                            | 3,853,651                                    | 26,185                                | 0.0068         | 0.9932        | 98.81                            |
| 10.5                           | 3,854,274                                    | 24,089                                | 0.0062         | 0.9938        | 98.14                            |
| 11.5                           | 3,668,319                                    | 955                                   | 0.0003         | 0.9997        | 97.52                            |
| 12.5                           | 3,547,988                                    | 70,855                                | 0.0200         | 0.9800        | 97.50                            |
| 13.5                           | 3,395,652                                    | 20,717                                | 0.0061         | 0.9939        | 95.55                            |
| 14.5                           | 3,523,383                                    | 12,081                                | 0.0034         | 0.9966        | 94.97                            |
| 15.5                           | 3,636,448                                    | 24,393                                | 0.0067         | 0.9933        | 94.64                            |
| 16.5                           | 3,549,983                                    |                                       | 0.0000         | 1.0000        | 94.01                            |
| 17.5                           | 3,789,941                                    | 28,648                                | 0.0076         | 0.9924        | 94.01                            |
| 18.5                           | 3,455,344                                    | 5,968                                 | 0.0017         | 0.9983        | 93.30                            |
| 19.5                           | 3,421,271                                    | 47,147                                | 0.0138         | 0.9862        | 93.14                            |
| 20.5                           | 3,246,715                                    | 30,603                                | 0.0094         | 0.9906        | 91.85                            |
| 21.5                           | 3,319,983                                    | 9,932                                 | 0.0030         | 0.9970        | 90.99                            |
| 22.5                           | 3,283,420                                    | 28,919                                | 0.0088         | 0.9912        | 90.72                            |
| 23.5                           | 3,224,605                                    | 16,083                                | 0.0050         | 0.9950        | 89.92                            |
| 24.5                           | 3,183,788                                    |                                       | 0.0000         | 1.0000        | 89.47                            |
| 25.5                           | 3,180,450                                    |                                       | 0.0000         | 1.0000        | 89.47                            |
| 26.5                           | 3,180,524                                    |                                       | 0.0000         | 1.0000        | 89.47                            |
| 27.5                           | 3,110,367                                    | 173                                   | 0.0001         | 0.9999        | 89.47                            |
| 28.5                           | 3,089,880                                    | 2,630                                 | 0.0009         | 0.9991        | 89.46                            |
| 29.5                           | 2,798,734                                    |                                       | 0.0000         | 1.0000        | 89.39                            |
| 30.5                           | 2,760,166                                    | 31,303                                | 0.0113         | 0.9887        | 89.39                            |
| 31.5                           | 2,619,252                                    | 23,954                                | 0.0091         | 0.9909        | 88.37                            |
| 32.5                           | 2,484,550                                    |                                       | 0.0000         | 1.0000        | 87.56                            |
| 33.5                           | 2,414,264                                    | 720                                   | 0.0003         | 0.9997        | 87.56                            |
| 34.5                           | 2,393,175                                    | 2,775                                 | 0.0012         | 0.9988        | 87.54                            |
| 35.5                           | 1,771,328                                    |                                       | 0.0000         | 1.0000        | 87.44                            |
| 36.5                           | 1,768,842                                    |                                       | 0.0000         | 1.0000        | 87.44                            |
| 37.5                           | 1,532,028                                    | 799                                   | 0.0005         | 0.9995        | 87.44                            |
| 38.5                           | 1,513,387                                    |                                       | 0.0000         | 1.0000        | 87.39                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - LIFE SPAN GROUP

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1905-2015       |                                              |                                       | EXPERIENCE BAND 1975-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 39.5                           | 1,163,991                                    |                                       | 0.0000                    | 1.0000        | 87.39                            |
| 40.5                           | 1,157,714                                    | 4,275                                 | 0.0037                    | 0.9963        | 87.39                            |
| 41.5                           | 991,954                                      |                                       | 0.0000                    | 1.0000        | 87.07                            |
| 42.5                           | 958,618                                      | 12,186                                | 0.0127                    | 0.9873        | 87.07                            |
| 43.5                           | 932,463                                      |                                       | 0.0000                    | 1.0000        | 85.96                            |
| 44.5                           | 945,862                                      |                                       | 0.0000                    | 1.0000        | 85.96                            |
| 45.5                           | 817,717                                      | 22,581                                | 0.0276                    | 0.9724        | 85.96                            |
| 46.5                           | 775,162                                      |                                       | 0.0000                    | 1.0000        | 83.59                            |
| 47.5                           | 771,442                                      |                                       | 0.0000                    | 1.0000        | 83.59                            |
| 48.5                           | 767,671                                      | 683                                   | 0.0009                    | 0.9991        | 83.59                            |
| 49.5                           | 763,000                                      |                                       | 0.0000                    | 1.0000        | 83.51                            |
| 50.5                           | 770,009                                      |                                       | 0.0000                    | 1.0000        | 83.51                            |
| 51.5                           | 758,364                                      | 959                                   | 0.0013                    | 0.9987        | 83.51                            |
| 52.5                           | 576,966                                      |                                       | 0.0000                    | 1.0000        | 83.41                            |
| 53.5                           | 529,917                                      | 112                                   | 0.0002                    | 0.9998        | 83.41                            |
| 54.5                           | 127,040                                      |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 55.5                           | 126,416                                      |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 56.5                           | 125,695                                      |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 57.5                           | 128,795                                      |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 58.5                           | 81,622                                       |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 59.5                           | 54,831                                       |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 60.5                           | 54,831                                       |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 61.5                           | 61,812                                       |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 62.5                           | 61,812                                       |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 63.5                           | 63,045                                       |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 64.5                           | 63,045                                       |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 65.5                           | 63,045                                       |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 66.5                           | 63,386                                       |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 67.5                           | 55,797                                       |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 68.5                           | 51,886                                       |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 69.5                           | 84,305                                       |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 70.5                           | 85,720                                       | 2                                     | 0.0000                    | 1.0000        | 83.39                            |
| 71.5                           | 85,719                                       |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 72.5                           | 85,208                                       |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 73.5                           | 85,208                                       |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 74.5                           | 51,067                                       |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 75.5                           | 50,684                                       |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 76.5                           | 49,603                                       |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 77.5                           | 49,088                                       |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 78.5                           | 49,088                                       |                                       | 0.0000                    | 1.0000        | 83.39                            |

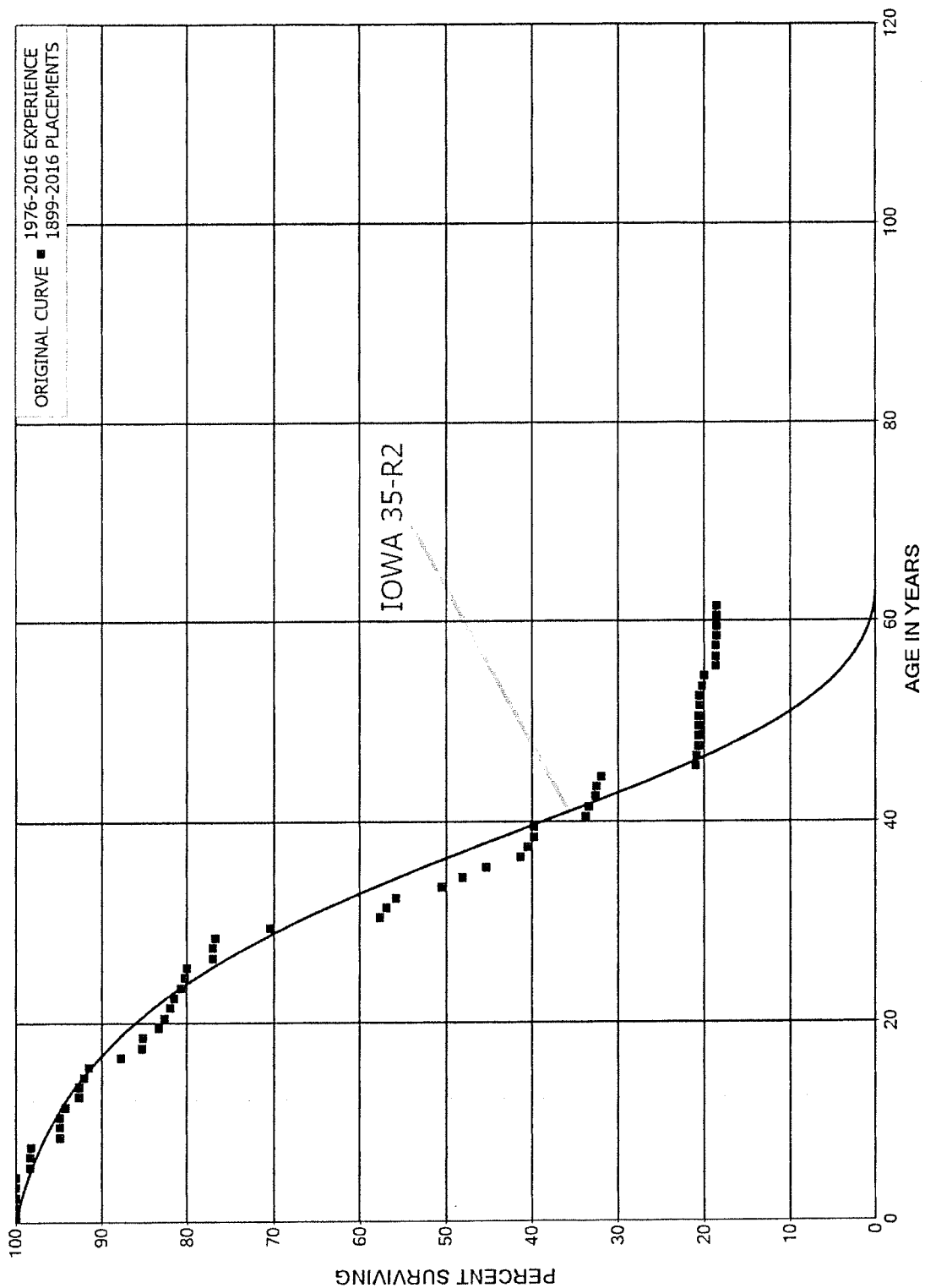
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - LIFE SPAN GROUP

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1905-2015       |                                              |                                       | EXPERIENCE BAND 1975-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 79.5                           | 74,112                                       |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 80.5                           | 74,112                                       |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 81.5                           | 73,683                                       |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 82.5                           | 73,683                                       |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 83.5                           | 73,281                                       |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 84.5                           | 73,281                                       |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 85.5                           | 39,524                                       |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 86.5                           | 39,229                                       |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 87.5                           | 39,229                                       |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 88.5                           | 38,690                                       |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 89.5                           | 38,690                                       |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 90.5                           | 38,690                                       |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 91.5                           | 38,690                                       |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 92.5                           | 38,690                                       |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 93.5                           | 38,690                                       |                                       | 0.0000                    | 1.0000        | 83.39                            |
| 94.5                           |                                              |                                       |                           |               | 83.39                            |

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 1899-2016

EXPERIENCE BAND 1976-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 0.0                            | 5,269,438                                    |                                       | 0.0000         | 1.0000        | 100.00                           |
| 0.5                            | 4,973,622                                    | 2,800                                 | 0.0006         | 0.9994        | 100.00                           |
| 1.5                            | 4,535,635                                    |                                       | 0.0000         | 1.0000        | 99.94                            |
| 2.5                            | 3,701,800                                    | 1,015                                 | 0.0003         | 0.9997        | 99.94                            |
| 3.5                            | 2,570,313                                    |                                       | 0.0000         | 1.0000        | 99.92                            |
| 4.5                            | 1,703,997                                    | 27,352                                | 0.0161         | 0.9839        | 99.92                            |
| 5.5                            | 839,395                                      |                                       | 0.0000         | 1.0000        | 98.31                            |
| 6.5                            | 825,370                                      | 1,283                                 | 0.0016         | 0.9984        | 98.31                            |
| 7.5                            | 620,580                                      | 20,678                                | 0.0333         | 0.9667        | 98.16                            |
| 8.5                            | 494,188                                      | 199                                   | 0.0004         | 0.9996        | 94.89                            |
| 9.5                            | 448,332                                      |                                       | 0.0000         | 1.0000        | 94.85                            |
| 10.5                           | 416,319                                      | 2,879                                 | 0.0069         | 0.9931        | 94.85                            |
| 11.5                           | 355,114                                      | 5,932                                 | 0.0167         | 0.9833        | 94.19                            |
| 12.5                           | 345,632                                      | 138                                   | 0.0004         | 0.9996        | 92.62                            |
| 13.5                           | 348,415                                      | 1,757                                 | 0.0050         | 0.9950        | 92.58                            |
| 14.5                           | 370,330                                      | 2,529                                 | 0.0068         | 0.9932        | 92.12                            |
| 15.5                           | 370,198                                      | 15,360                                | 0.0415         | 0.9585        | 91.49                            |
| 16.5                           | 327,360                                      | 8,990                                 | 0.0275         | 0.9725        | 87.69                            |
| 17.5                           | 311,462                                      | 384                                   | 0.0012         | 0.9988        | 85.28                            |
| 18.5                           | 249,802                                      | 5,462                                 | 0.0219         | 0.9781        | 85.18                            |
| 19.5                           | 255,214                                      | 2,117                                 | 0.0083         | 0.9917        | 83.32                            |
| 20.5                           | 292,610                                      | 2,417                                 | 0.0083         | 0.9917        | 82.63                            |
| 21.5                           | 256,431                                      | 1,334                                 | 0.0052         | 0.9948        | 81.94                            |
| 22.5                           | 258,022                                      | 2,536                                 | 0.0098         | 0.9902        | 81.52                            |
| 23.5                           | 252,936                                      | 1,343                                 | 0.0053         | 0.9947        | 80.72                            |
| 24.5                           | 255,255                                      | 725                                   | 0.0028         | 0.9972        | 80.29                            |
| 25.5                           | 246,057                                      | 9,144                                 | 0.0372         | 0.9628        | 80.06                            |
| 26.5                           | 192,099                                      |                                       | 0.0000         | 1.0000        | 77.08                            |
| 27.5                           | 195,240                                      | 871                                   | 0.0045         | 0.9955        | 77.08                            |
| 28.5                           | 176,601                                      | 14,605                                | 0.0827         | 0.9173        | 76.74                            |
| 29.5                           | 157,021                                      | 28,346                                | 0.1805         | 0.8195        | 70.39                            |
| 30.5                           | 129,477                                      | 1,742                                 | 0.0135         | 0.9865        | 57.69                            |
| 31.5                           | 118,025                                      | 2,147                                 | 0.0182         | 0.9818        | 56.91                            |
| 32.5                           | 106,120                                      | 10,113                                | 0.0953         | 0.9047        | 55.87                            |
| 33.5                           | 89,457                                       | 4,442                                 | 0.0497         | 0.9503        | 50.55                            |
| 34.5                           | 82,295                                       | 4,759                                 | 0.0578         | 0.9422        | 48.04                            |
| 35.5                           | 77,717                                       | 6,813                                 | 0.0877         | 0.9123        | 45.26                            |
| 36.5                           | 83,981                                       | 1,590                                 | 0.0189         | 0.9811        | 41.29                            |
| 37.5                           | 82,587                                       | 1,652                                 | 0.0200         | 0.9800        | 40.51                            |
| 38.5                           | 79,751                                       | 37                                    | 0.0005         | 0.9995        | 39.70                            |



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - CONTINUOUS GROUP

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1899-2016       |                                              |                                       | EXPERIENCE BAND 1976-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 39.5                           | 73,804                                       | 11,088                                | 0.1502                    | 0.8498        | 39.68                            |
| 40.5                           | 62,381                                       | 521                                   | 0.0083                    | 0.9917        | 33.72                            |
| 41.5                           | 61,108                                       | 1,453                                 | 0.0238                    | 0.9762        | 33.44                            |
| 42.5                           | 59,252                                       | 188                                   | 0.0032                    | 0.9968        | 32.64                            |
| 43.5                           | 58,831                                       | 975                                   | 0.0166                    | 0.9834        | 32.54                            |
| 44.5                           | 77,147                                       | 26,538                                | 0.3440                    | 0.6560        | 32.00                            |
| 45.5                           | 49,698                                       | 260                                   | 0.0052                    | 0.9948        | 20.99                            |
| 46.5                           | 63,270                                       | 797                                   | 0.0126                    | 0.9874        | 20.88                            |
| 47.5                           | 60,155                                       |                                       | 0.0000                    | 1.0000        | 20.62                            |
| 48.5                           | 60,282                                       |                                       | 0.0000                    | 1.0000        | 20.62                            |
| 49.5                           | 61,402                                       | 176                                   | 0.0029                    | 0.9971        | 20.62                            |
| 50.5                           | 59,110                                       | 218                                   | 0.0037                    | 0.9963        | 20.56                            |
| 51.5                           | 67,112                                       |                                       | 0.0000                    | 1.0000        | 20.49                            |
| 52.5                           | 65,994                                       | 1,146                                 | 0.0174                    | 0.9826        | 20.49                            |
| 53.5                           | 68,740                                       | 480                                   | 0.0070                    | 0.9930        | 20.13                            |
| 54.5                           | 68,260                                       | 4,796                                 | 0.0703                    | 0.9297        | 19.99                            |
| 55.5                           | 57,594                                       |                                       | 0.0000                    | 1.0000        | 18.59                            |
| 56.5                           | 57,737                                       |                                       | 0.0000                    | 1.0000        | 18.59                            |
| 57.5                           | 52,699                                       | 354                                   | 0.0067                    | 0.9933        | 18.59                            |
| 58.5                           | 52,476                                       |                                       | 0.0000                    | 1.0000        | 18.46                            |
| 59.5                           | 52,375                                       |                                       | 0.0000                    | 1.0000        | 18.46                            |
| 60.5                           | 52,081                                       |                                       | 0.0000                    | 1.0000        | 18.46                            |
| 61.5                           | 37,704                                       |                                       | 0.0000                    | 1.0000        | 18.46                            |
| 62.5                           | 60,543                                       | 7,561                                 | 0.1249                    | 0.8751        | 18.46                            |
| 63.5                           | 44,109                                       |                                       | 0.0000                    | 1.0000        | 16.15                            |
| 64.5                           | 44,109                                       |                                       | 0.0000                    | 1.0000        | 16.15                            |
| 65.5                           | 44,015                                       | 1,403                                 | 0.0319                    | 0.9681        | 16.15                            |
| 66.5                           | 42,215                                       |                                       | 0.0000                    | 1.0000        | 15.64                            |
| 67.5                           | 42,215                                       |                                       | 0.0000                    | 1.0000        | 15.64                            |
| 68.5                           | 33,357                                       |                                       | 0.0000                    | 1.0000        | 15.64                            |
| 69.5                           | 33,357                                       | 343                                   | 0.0103                    | 0.9897        | 15.64                            |
| 70.5                           | 31,599                                       |                                       | 0.0000                    | 1.0000        | 15.48                            |
| 71.5                           | 31,599                                       |                                       | 0.0000                    | 1.0000        | 15.48                            |
| 72.5                           | 31,599                                       |                                       | 0.0000                    | 1.0000        | 15.48                            |
| 73.5                           | 31,599                                       |                                       | 0.0000                    | 1.0000        | 15.48                            |
| 74.5                           | 31,599                                       |                                       | 0.0000                    | 1.0000        | 15.48                            |
| 75.5                           | 31,469                                       | 111                                   | 0.0035                    | 0.9965        | 15.48                            |
| 76.5                           | 31,917                                       | 560                                   | 0.0175                    | 0.9825        | 15.42                            |
| 77.5                           | 30,155                                       |                                       | 0.0000                    | 1.0000        | 15.15                            |
| 78.5                           | 30,155                                       |                                       | 0.0000                    | 1.0000        | 15.15                            |

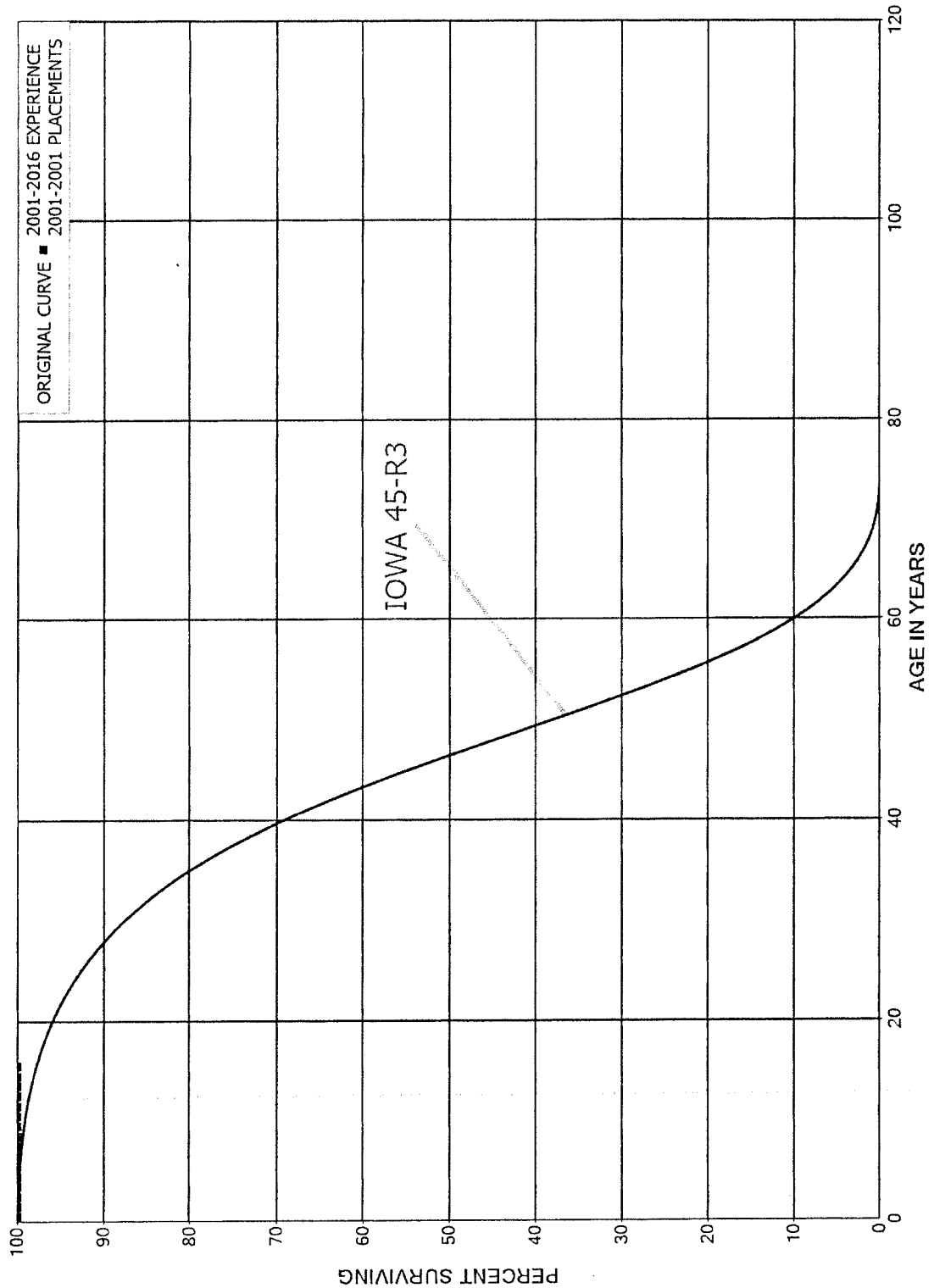
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - CONTINUOUS GROUP

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1899-2016       |                                              |                                       | EXPERIENCE BAND 1976-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 79.5                           | 5,053                                        |                                       | 0.0000                    | 1.0000        | 15.15                            |
| 80.5                           | 5,053                                        |                                       | 0.0000                    | 1.0000        | 15.15                            |
| 81.5                           | 5,053                                        |                                       | 0.0000                    | 1.0000        | 15.15                            |
| 82.5                           | 4,275                                        | 127                                   | 0.0297                    | 0.9703        | 15.15                            |
| 83.5                           | 4,148                                        |                                       | 0.0000                    | 1.0000        | 14.70                            |
| 84.5                           | 4,148                                        |                                       | 0.0000                    | 1.0000        | 14.70                            |
| 85.5                           | 143                                          |                                       | 0.0000                    | 1.0000        | 14.70                            |
| 86.5                           | 143                                          |                                       | 0.0000                    | 1.0000        | 14.70                            |
| 87.5                           | 143                                          |                                       | 0.0000                    | 1.0000        | 14.70                            |
| 88.5                           | 143                                          |                                       | 0.0000                    | 1.0000        | 14.70                            |
| 89.5                           | 143                                          |                                       | 0.0000                    | 1.0000        | 14.70                            |
| 90.5                           | 143                                          |                                       | 0.0000                    | 1.0000        | 14.70                            |
| 91.5                           | 143                                          |                                       | 0.0000                    | 1.0000        | 14.70                            |
| 92.5                           | 143                                          |                                       | 0.0000                    | 1.0000        | 14.70                            |
| 93.5                           | 143                                          |                                       | 0.0000                    | 1.0000        | 14.70                            |
| 94.5                           | 143                                          |                                       | 0.0000                    | 1.0000        | 14.70                            |
| 95.5                           | 143                                          |                                       | 0.0000                    | 1.0000        | 14.70                            |
| 96.5                           | 143                                          |                                       | 0.0000                    | 1.0000        | 14.70                            |
| 97.5                           |                                              |                                       |                           |               | 14.70                            |

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



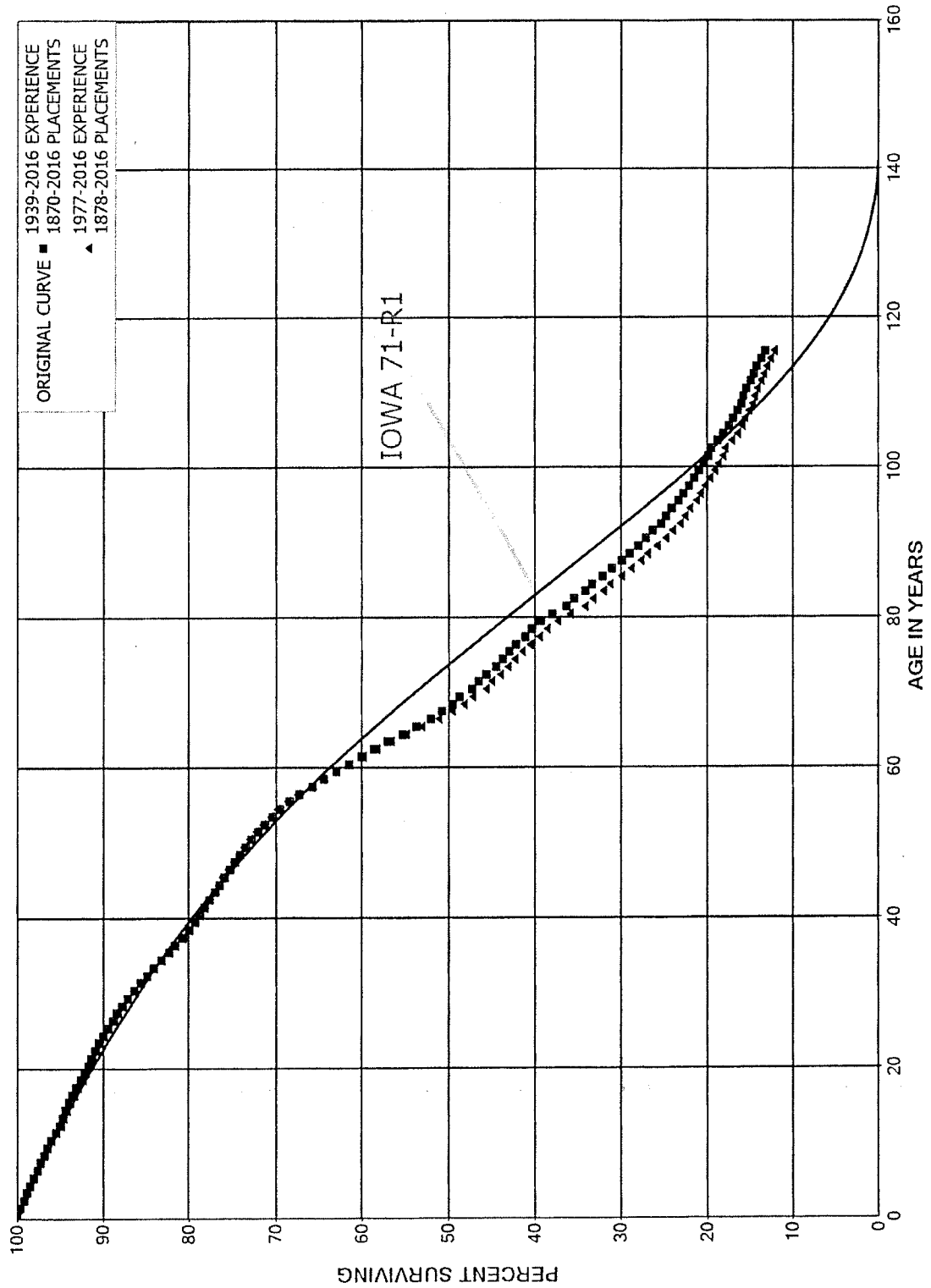
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.8 STRUCTURES AND IMPROVEMENTS - COMMUNICATION

ORIGINAL LIFE TABLE

| PLACEMENT BAND 2001-2001       |                                              |                                       | EXPERIENCE BAND 2001-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>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                           | 16,515                                       |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 11.5                           | 16,515                                       |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 12.5                           | 16,515                                       |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 13.5                           | 16,515                                       |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 14.5                           | 16,515                                       |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 15.5                           |                                              |                                       |                           |               | 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 1870-2016

EXPERIENCE BAND 1939-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 0.0                            | 1,337,362,877                                | 536,537                               | 0.0004         | 0.9996        | 100.00                           |
| 0.5                            | 1,175,780,482                                | 4,490,317                             | 0.0038         | 0.9962        | 99.96                            |
| 1.5                            | 1,049,138,250                                | 3,904,643                             | 0.0037         | 0.9963        | 99.58                            |
| 2.5                            | 921,780,278                                  | 3,558,004                             | 0.0039         | 0.9961        | 99.21                            |
| 3.5                            | 797,982,736                                  | 2,981,306                             | 0.0037         | 0.9963        | 98.82                            |
| 4.5                            | 702,627,907                                  | 2,821,418                             | 0.0040         | 0.9960        | 98.46                            |
| 5.5                            | 615,472,731                                  | 2,517,319                             | 0.0041         | 0.9959        | 98.06                            |
| 6.5                            | 569,029,849                                  | 2,212,779                             | 0.0039         | 0.9961        | 97.66                            |
| 7.5                            | 533,482,502                                  | 2,167,594                             | 0.0041         | 0.9959        | 97.28                            |
| 8.5                            | 476,988,990                                  | 2,106,727                             | 0.0044         | 0.9956        | 96.88                            |
| 9.5                            | 442,020,441                                  | 1,583,742                             | 0.0036         | 0.9964        | 96.46                            |
| 10.5                           | 420,275,011                                  | 2,433,987                             | 0.0058         | 0.9942        | 96.11                            |
| 11.5                           | 396,220,982                                  | 1,913,188                             | 0.0048         | 0.9952        | 95.55                            |
| 12.5                           | 377,584,843                                  | 1,433,620                             | 0.0038         | 0.9962        | 95.09                            |
| 13.5                           | 369,010,396                                  | 1,420,374                             | 0.0038         | 0.9962        | 94.73                            |
| 14.5                           | 360,804,609                                  | 1,368,473                             | 0.0038         | 0.9962        | 94.37                            |
| 15.5                           | 351,489,791                                  | 1,558,792                             | 0.0044         | 0.9956        | 94.01                            |
| 16.5                           | 329,207,033                                  | 1,548,258                             | 0.0047         | 0.9953        | 93.59                            |
| 17.5                           | 317,370,608                                  | 1,833,661                             | 0.0058         | 0.9942        | 93.15                            |
| 18.5                           | 304,994,788                                  | 1,415,166                             | 0.0046         | 0.9954        | 92.61                            |
| 19.5                           | 290,707,020                                  | 1,407,489                             | 0.0048         | 0.9952        | 92.18                            |
| 20.5                           | 278,962,719                                  | 1,195,812                             | 0.0043         | 0.9957        | 91.74                            |
| 21.5                           | 268,282,362                                  | 1,178,164                             | 0.0044         | 0.9956        | 91.34                            |
| 22.5                           | 256,338,049                                  | 1,301,687                             | 0.0051         | 0.9949        | 90.94                            |
| 23.5                           | 246,300,685                                  | 1,360,917                             | 0.0055         | 0.9945        | 90.48                            |
| 24.5                           | 236,786,102                                  | 1,350,612                             | 0.0057         | 0.9943        | 89.98                            |
| 25.5                           | 228,424,117                                  | 1,654,831                             | 0.0072         | 0.9928        | 89.47                            |
| 26.5                           | 219,670,599                                  | 1,174,876                             | 0.0053         | 0.9947        | 88.82                            |
| 27.5                           | 209,936,913                                  | 1,290,250                             | 0.0061         | 0.9939        | 88.34                            |
| 28.5                           | 199,133,097                                  | 1,367,339                             | 0.0069         | 0.9931        | 87.80                            |
| 29.5                           | 189,731,093                                  | 1,751,446                             | 0.0092         | 0.9908        | 87.20                            |
| 30.5                           | 179,317,194                                  | 1,618,936                             | 0.0090         | 0.9910        | 86.39                            |
| 31.5                           | 170,041,762                                  | 1,441,487                             | 0.0085         | 0.9915        | 85.61                            |
| 32.5                           | 160,392,333                                  | 1,589,902                             | 0.0099         | 0.9901        | 84.89                            |
| 33.5                           | 151,704,867                                  | 1,554,375                             | 0.0102         | 0.9898        | 84.05                            |
| 34.5                           | 141,094,759                                  | 1,499,268                             | 0.0106         | 0.9894        | 83.19                            |
| 35.5                           | 130,697,147                                  | 1,127,670                             | 0.0086         | 0.9914        | 82.30                            |
| 36.5                           | 121,727,125                                  | 1,280,477                             | 0.0105         | 0.9895        | 81.59                            |
| 37.5                           | 114,717,567                                  | 1,141,673                             | 0.0100         | 0.9900        | 80.73                            |
| 38.5                           | 108,478,611                                  | 806,778                               | 0.0074         | 0.9926        | 79.93                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 376.1, 376.3 AND 376.45 MAINS

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1870-2016       |                                              |                                       | EXPERIENCE BAND 1939-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 39.5                           | 102,534,363                                  | 834,527                               | 0.0081                    | 0.9919        | 79.34                            |
| 40.5                           | 99,050,818                                   | 702,178                               | 0.0071                    | 0.9929        | 78.69                            |
| 41.5                           | 95,486,892                                   | 692,604                               | 0.0073                    | 0.9927        | 78.13                            |
| 42.5                           | 91,994,179                                   | 724,606                               | 0.0079                    | 0.9921        | 77.57                            |
| 43.5                           | 88,085,140                                   | 552,770                               | 0.0063                    | 0.9937        | 76.95                            |
| 44.5                           | 85,723,644                                   | 554,064                               | 0.0065                    | 0.9935        | 76.47                            |
| 45.5                           | 81,387,190                                   | 737,976                               | 0.0091                    | 0.9909        | 75.98                            |
| 46.5                           | 78,924,832                                   | 597,456                               | 0.0076                    | 0.9924        | 75.29                            |
| 47.5                           | 75,305,639                                   | 599,837                               | 0.0080                    | 0.9920        | 74.72                            |
| 48.5                           | 71,544,016                                   | 580,581                               | 0.0081                    | 0.9919        | 74.12                            |
| 49.5                           | 66,890,343                                   | 644,639                               | 0.0096                    | 0.9904        | 73.52                            |
| 50.5                           | 61,877,589                                   | 633,640                               | 0.0102                    | 0.9898        | 72.81                            |
| 51.5                           | 58,316,834                                   | 654,131                               | 0.0112                    | 0.9888        | 72.07                            |
| 52.5                           | 53,903,369                                   | 667,568                               | 0.0124                    | 0.9876        | 71.26                            |
| 53.5                           | 49,413,139                                   | 575,334                               | 0.0116                    | 0.9884        | 70.38                            |
| 54.5                           | 45,925,704                                   | 767,706                               | 0.0167                    | 0.9833        | 69.56                            |
| 55.5                           | 42,245,998                                   | 706,440                               | 0.0167                    | 0.9833        | 68.39                            |
| 56.5                           | 38,428,224                                   | 867,374                               | 0.0226                    | 0.9774        | 67.25                            |
| 57.5                           | 34,552,388                                   | 693,337                               | 0.0201                    | 0.9799        | 65.73                            |
| 58.5                           | 30,275,872                                   | 672,325                               | 0.0222                    | 0.9778        | 64.41                            |
| 59.5                           | 26,501,964                                   | 632,176                               | 0.0239                    | 0.9761        | 62.98                            |
| 60.5                           | 23,469,946                                   | 545,979                               | 0.0233                    | 0.9767        | 61.48                            |
| 61.5                           | 18,671,646                                   | 444,931                               | 0.0238                    | 0.9762        | 60.05                            |
| 62.5                           | 16,497,730                                   | 431,137                               | 0.0261                    | 0.9739        | 58.62                            |
| 63.5                           | 14,694,170                                   | 451,554                               | 0.0307                    | 0.9693        | 57.09                            |
| 64.5                           | 12,245,619                                   | 352,121                               | 0.0288                    | 0.9712        | 55.33                            |
| 65.5                           | 11,098,609                                   | 345,058                               | 0.0311                    | 0.9689        | 53.74                            |
| 66.5                           | 9,610,128                                    | 247,180                               | 0.0257                    | 0.9743        | 52.07                            |
| 67.5                           | 8,649,676                                    | 201,561                               | 0.0233                    | 0.9767        | 50.73                            |
| 68.5                           | 8,373,298                                    | 143,700                               | 0.0172                    | 0.9828        | 49.55                            |
| 69.5                           | 8,218,544                                    | 230,729                               | 0.0281                    | 0.9719        | 48.70                            |
| 70.5                           | 7,902,450                                    | 133,005                               | 0.0168                    | 0.9832        | 47.33                            |
| 71.5                           | 7,841,739                                    | 160,166                               | 0.0204                    | 0.9796        | 46.54                            |
| 72.5                           | 7,672,383                                    | 175,832                               | 0.0229                    | 0.9771        | 45.59                            |
| 73.5                           | 7,662,375                                    | 131,075                               | 0.0171                    | 0.9829        | 44.54                            |
| 74.5                           | 7,613,164                                    | 139,363                               | 0.0183                    | 0.9817        | 43.78                            |
| 75.5                           | 7,311,867                                    | 132,124                               | 0.0181                    | 0.9819        | 42.98                            |
| 76.5                           | 7,091,666                                    | 181,821                               | 0.0256                    | 0.9744        | 42.20                            |
| 77.5                           | 6,709,773                                    | 127,244                               | 0.0190                    | 0.9810        | 41.12                            |
| 78.5                           | 6,520,573                                    | 166,919                               | 0.0256                    | 0.9744        | 40.34                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 376.1, 376.3 AND 376.45 MAINS

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1870-2016       |                                              |                                       | EXPERIENCE BAND 1939-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 79.5                           | 6,275,033                                    | 207,314                               | 0.0330                    | 0.9670        | 39.31                            |
| 80.5                           | 6,014,130                                    | 267,866                               | 0.0445                    | 0.9555        | 38.01                            |
| 81.5                           | 5,700,580                                    | 137,467                               | 0.0241                    | 0.9759        | 36.31                            |
| 82.5                           | 5,522,085                                    | 213,941                               | 0.0387                    | 0.9613        | 35.44                            |
| 83.5                           | 5,279,459                                    | 128,991                               | 0.0244                    | 0.9756        | 34.07                            |
| 84.5                           | 5,115,785                                    | 181,899                               | 0.0356                    | 0.9644        | 33.23                            |
| 85.5                           | 4,782,334                                    | 172,518                               | 0.0361                    | 0.9639        | 32.05                            |
| 86.5                           | 4,450,298                                    | 153,856                               | 0.0346                    | 0.9654        | 30.90                            |
| 87.5                           | 4,096,729                                    | 115,200                               | 0.0281                    | 0.9719        | 29.83                            |
| 88.5                           | 3,827,208                                    | 131,796                               | 0.0344                    | 0.9656        | 28.99                            |
| 89.5                           | 3,601,878                                    | 125,541                               | 0.0349                    | 0.9651        | 27.99                            |
| 90.5                           | 3,331,143                                    | 94,111                                | 0.0283                    | 0.9717        | 27.02                            |
| 91.5                           | 3,111,897                                    | 108,991                               | 0.0350                    | 0.9650        | 26.25                            |
| 92.5                           | 2,916,752                                    | 74,030                                | 0.0254                    | 0.9746        | 25.33                            |
| 93.5                           | 2,788,476                                    | 69,088                                | 0.0248                    | 0.9752        | 24.69                            |
| 94.5                           | 2,566,957                                    | 87,891                                | 0.0342                    | 0.9658        | 24.08                            |
| 95.5                           | 2,439,257                                    | 58,872                                | 0.0241                    | 0.9759        | 23.25                            |
| 96.5                           | 2,368,749                                    | 61,172                                | 0.0258                    | 0.9742        | 22.69                            |
| 97.5                           | 2,293,355                                    | 62,374                                | 0.0272                    | 0.9728        | 22.11                            |
| 98.5                           | 2,223,723                                    | 60,799                                | 0.0273                    | 0.9727        | 21.50                            |
| 99.5                           | 2,140,155                                    | 49,821                                | 0.0233                    | 0.9767        | 20.92                            |
| 100.5                          | 2,072,699                                    | 59,751                                | 0.0288                    | 0.9712        | 20.43                            |
| 101.5                          | 1,993,600                                    | 33,827                                | 0.0170                    | 0.9830        | 19.84                            |
| 102.5                          | 1,935,456                                    | 78,579                                | 0.0406                    | 0.9594        | 19.50                            |
| 103.5                          | 1,815,064                                    | 67,807                                | 0.0374                    | 0.9626        | 18.71                            |
| 104.5                          | 1,731,303                                    | 63,094                                | 0.0364                    | 0.9636        | 18.01                            |
| 105.5                          | 1,644,379                                    | 36,819                                | 0.0224                    | 0.9776        | 17.36                            |
| 106.5                          | 1,586,986                                    | 51,027                                | 0.0322                    | 0.9678        | 16.97                            |
| 107.5                          | 1,515,993                                    | 43,040                                | 0.0284                    | 0.9716        | 16.42                            |
| 108.5                          | 1,439,894                                    | 17,160                                | 0.0119                    | 0.9881        | 15.96                            |
| 109.5                          | 1,351,897                                    | 31,370                                | 0.0232                    | 0.9768        | 15.77                            |
| 110.5                          | 1,301,347                                    | 48,149                                | 0.0370                    | 0.9630        | 15.40                            |
| 111.5                          | 1,220,297                                    | 24,436                                | 0.0200                    | 0.9800        | 14.83                            |
| 112.5                          | 1,157,796                                    | 28,320                                | 0.0245                    | 0.9755        | 14.53                            |
| 113.5                          | 1,097,026                                    | 42,701                                | 0.0389                    | 0.9611        | 14.18                            |
| 114.5                          | 1,000,460                                    | 30,679                                | 0.0307                    | 0.9693        | 13.63                            |
| 115.5                          | 925,450                                      | 2,291                                 | 0.0025                    | 0.9975        | 13.21                            |
| 116.5                          | 796,728                                      | 3,244                                 | 0.0041                    | 0.9959        | 13.18                            |
| 117.5                          | 768,677                                      | 3,780                                 | 0.0049                    | 0.9951        | 13.12                            |
| 118.5                          | 699,900                                      | 2,928                                 | 0.0042                    | 0.9958        | 13.06                            |



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 376.1, 376.3 AND 376.45 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1870-2016

EXPERIENCE BAND 1939-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 119.5                          | 684,005                                      | 23,607                                | 0.0345         | 0.9655        | 13.00                            |
| 120.5                          | 573,606                                      | 34,274                                | 0.0598         | 0.9402        | 12.55                            |
| 121.5                          | 536,951                                      | 17,962                                | 0.0335         | 0.9665        | 11.80                            |
| 122.5                          | 480,421                                      | 23,866                                | 0.0497         | 0.9503        | 11.41                            |
| 123.5                          | 401,918                                      | 39,601                                | 0.0985         | 0.9015        | 10.84                            |
| 124.5                          | 346,364                                      | 9,622                                 | 0.0278         | 0.9722        | 9.77                             |
| 125.5                          | 326,347                                      | 2,265                                 | 0.0069         | 0.9931        | 9.50                             |
| 126.5                          | 301,663                                      |                                       | 0.0000         | 1.0000        | 9.44                             |
| 127.5                          | 297,176                                      |                                       | 0.0000         | 1.0000        | 9.44                             |
| 128.5                          | 257,753                                      | 95,118                                | 0.3690         | 0.6310        | 9.44                             |
| 129.5                          | 99,056                                       | 79,586                                | 0.8034         | 0.1966        | 5.95                             |
| 130.5                          | 7,763                                        | 3,689                                 | 0.4751         | 0.5249        | 1.17                             |
| 131.5                          | 4,075                                        | 3,720                                 | 0.9129         | 0.0871        | 0.61                             |
| 132.5                          | 355                                          | 225                                   | 0.6340         | 0.3660        | 0.05                             |
| 133.5                          | 130                                          | 130                                   | 1.0000         |               | 0.02                             |
| 134.5                          |                                              |                                       |                |               |                                  |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 376.1, 376.3 AND 376.45 MAINS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1878-2016

EXPERIENCE BAND 1977-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 0.0                            | 1,250,845,932                                | 506,248                               | 0.0004         | 0.9996        | 100.00                           |
| 0.5                            | 1,091,544,153                                | 4,266,888                             | 0.0039         | 0.9961        | 99.96                            |
| 1.5                            | 966,861,215                                  | 3,751,717                             | 0.0039         | 0.9961        | 99.57                            |
| 2.5                            | 840,389,937                                  | 3,345,336                             | 0.0040         | 0.9960        | 99.18                            |
| 3.5                            | 719,564,484                                  | 2,827,912                             | 0.0039         | 0.9961        | 98.79                            |
| 4.5                            | 623,701,554                                  | 2,633,909                             | 0.0042         | 0.9958        | 98.40                            |
| 5.5                            | 540,258,996                                  | 2,354,817                             | 0.0044         | 0.9956        | 97.98                            |
| 6.5                            | 494,381,271                                  | 2,102,932                             | 0.0043         | 0.9957        | 97.56                            |
| 7.5                            | 460,126,357                                  | 1,986,793                             | 0.0043         | 0.9957        | 97.14                            |
| 8.5                            | 406,561,782                                  | 1,970,628                             | 0.0048         | 0.9952        | 96.72                            |
| 9.5                            | 375,007,304                                  | 1,432,797                             | 0.0038         | 0.9962        | 96.25                            |
| 10.5                           | 357,438,596                                  | 2,300,641                             | 0.0064         | 0.9936        | 95.89                            |
| 11.5                           | 336,189,763                                  | 1,761,389                             | 0.0052         | 0.9948        | 95.27                            |
| 12.5                           | 321,075,446                                  | 1,239,484                             | 0.0039         | 0.9961        | 94.77                            |
| 13.5                           | 316,735,725                                  | 1,257,568                             | 0.0040         | 0.9960        | 94.40                            |
| 14.5                           | 311,808,496                                  | 1,266,155                             | 0.0041         | 0.9959        | 94.03                            |
| 15.5                           | 306,534,105                                  | 1,392,570                             | 0.0045         | 0.9955        | 93.65                            |
| 16.5                           | 287,575,691                                  | 1,402,127                             | 0.0049         | 0.9951        | 93.22                            |
| 17.5                           | 279,500,489                                  | 1,657,542                             | 0.0059         | 0.9941        | 92.77                            |
| 18.5                           | 271,259,870                                  | 1,244,129                             | 0.0046         | 0.9954        | 92.22                            |
| 19.5                           | 260,623,050                                  | 1,136,794                             | 0.0044         | 0.9956        | 91.79                            |
| 20.5                           | 252,541,093                                  | 1,043,929                             | 0.0041         | 0.9959        | 91.39                            |
| 21.5                           | 247,492,284                                  | 1,078,449                             | 0.0044         | 0.9956        | 91.02                            |
| 22.5                           | 238,254,087                                  | 1,170,445                             | 0.0049         | 0.9951        | 90.62                            |
| 23.5                           | 230,594,336                                  | 1,268,693                             | 0.0055         | 0.9945        | 90.17                            |
| 24.5                           | 224,879,643                                  | 1,289,604                             | 0.0057         | 0.9943        | 89.68                            |
| 25.5                           | 218,050,543                                  | 1,551,283                             | 0.0071         | 0.9929        | 89.16                            |
| 26.5                           | 211,724,213                                  | 1,122,159                             | 0.0053         | 0.9947        | 88.53                            |
| 27.5                           | 203,744,016                                  | 1,216,734                             | 0.0060         | 0.9940        | 88.06                            |
| 28.5                           | 193,508,394                                  | 1,303,824                             | 0.0067         | 0.9933        | 87.53                            |
| 29.5                           | 183,990,717                                  | 1,691,283                             | 0.0092         | 0.9908        | 86.94                            |
| 30.5                           | 173,679,677                                  | 1,551,737                             | 0.0089         | 0.9911        | 86.15                            |
| 31.5                           | 164,290,003                                  | 1,353,878                             | 0.0082         | 0.9918        | 85.38                            |
| 32.5                           | 154,542,386                                  | 1,538,818                             | 0.0100         | 0.9900        | 84.67                            |
| 33.5                           | 145,789,675                                  | 1,455,535                             | 0.0100         | 0.9900        | 83.83                            |
| 34.5                           | 135,239,485                                  | 1,430,343                             | 0.0106         | 0.9894        | 82.99                            |
| 35.5                           | 124,963,555                                  | 1,058,210                             | 0.0085         | 0.9915        | 82.11                            |
| 36.5                           | 115,934,921                                  | 1,206,256                             | 0.0104         | 0.9896        | 81.42                            |
| 37.5                           | 108,937,539                                  | 1,061,441                             | 0.0097         | 0.9903        | 80.57                            |
| 38.5                           | 102,638,511                                  | 736,116                               | 0.0072         | 0.9928        | 79.79                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 376.1, 376.3 AND 376.45 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1878-2016

EXPERIENCE BAND 1977-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 39.5                           | 96,711,770                                   | 746,147                               | 0.0077         | 0.9923        | 79.21                            |
| 40.5                           | 93,319,385                                   | 650,370                               | 0.0070         | 0.9930        | 78.60                            |
| 41.5                           | 89,808,180                                   | 627,797                               | 0.0070         | 0.9930        | 78.06                            |
| 42.5                           | 86,338,510                                   | 630,273                               | 0.0073         | 0.9927        | 77.51                            |
| 43.5                           | 82,531,183                                   | 499,048                               | 0.0060         | 0.9940        | 76.94                            |
| 44.5                           | 80,126,079                                   | 459,165                               | 0.0057         | 0.9943        | 76.48                            |
| 45.5                           | 75,943,180                                   | 673,309                               | 0.0089         | 0.9911        | 76.04                            |
| 46.5                           | 73,881,297                                   | 538,791                               | 0.0073         | 0.9927        | 75.37                            |
| 47.5                           | 70,811,743                                   | 559,124                               | 0.0079         | 0.9921        | 74.82                            |
| 48.5                           | 67,354,734                                   | 539,280                               | 0.0080         | 0.9920        | 74.23                            |
| 49.5                           | 62,997,779                                   | 596,208                               | 0.0095         | 0.9905        | 73.63                            |
| 50.5                           | 58,275,429                                   | 593,020                               | 0.0102         | 0.9898        | 72.93                            |
| 51.5                           | 54,930,375                                   | 622,107                               | 0.0113         | 0.9887        | 72.19                            |
| 52.5                           | 50,650,896                                   | 626,941                               | 0.0124         | 0.9876        | 71.37                            |
| 53.5                           | 46,328,047                                   | 525,651                               | 0.0113         | 0.9887        | 70.49                            |
| 54.5                           | 42,861,046                                   | 701,332                               | 0.0164         | 0.9836        | 69.69                            |
| 55.5                           | 38,716,020                                   | 676,058                               | 0.0175         | 0.9825        | 68.55                            |
| 56.5                           | 34,838,704                                   | 824,832                               | 0.0237         | 0.9763        | 67.35                            |
| 57.5                           | 30,962,275                                   | 648,700                               | 0.0210         | 0.9790        | 65.76                            |
| 58.5                           | 26,468,833                                   | 629,534                               | 0.0238         | 0.9762        | 64.38                            |
| 59.5                           | 22,636,863                                   | 551,920                               | 0.0244         | 0.9756        | 62.85                            |
| 60.5                           | 19,595,544                                   | 506,482                               | 0.0258         | 0.9742        | 61.32                            |
| 61.5                           | 14,879,042                                   | 391,937                               | 0.0263         | 0.9737        | 59.73                            |
| 62.5                           | 12,813,622                                   | 374,637                               | 0.0292         | 0.9708        | 58.16                            |
| 63.5                           | 11,651,556                                   | 350,049                               | 0.0300         | 0.9700        | 56.46                            |
| 64.5                           | 9,256,371                                    | 310,259                               | 0.0335         | 0.9665        | 54.76                            |
| 65.5                           | 8,102,398                                    | 301,767                               | 0.0372         | 0.9628        | 52.93                            |
| 66.5                           | 6,699,671                                    | 204,388                               | 0.0305         | 0.9695        | 50.96                            |
| 67.5                           | 5,837,720                                    | 157,572                               | 0.0270         | 0.9730        | 49.40                            |
| 68.5                           | 5,546,965                                    | 110,057                               | 0.0198         | 0.9802        | 48.07                            |
| 69.5                           | 5,500,640                                    | 181,595                               | 0.0330         | 0.9670        | 47.11                            |
| 70.5                           | 5,264,616                                    | 84,198                                | 0.0160         | 0.9840        | 45.56                            |
| 71.5                           | 5,275,659                                    | 112,735                               | 0.0214         | 0.9786        | 44.83                            |
| 72.5                           | 5,264,904                                    | 105,844                               | 0.0201         | 0.9799        | 43.87                            |
| 73.5                           | 5,224,049                                    | 96,982                                | 0.0186         | 0.9814        | 42.99                            |
| 74.5                           | 5,169,233                                    | 105,622                               | 0.0204         | 0.9796        | 42.19                            |
| 75.5                           | 5,182,423                                    | 112,917                               | 0.0218         | 0.9782        | 41.33                            |
| 76.5                           | 5,170,677                                    | 152,672                               | 0.0295         | 0.9705        | 40.43                            |
| 77.5                           | 4,867,591                                    | 104,691                               | 0.0215         | 0.9785        | 39.24                            |
| 78.5                           | 4,818,329                                    | 147,484                               | 0.0306         | 0.9694        | 38.39                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 376.1, 376.3 AND 376.45 MAINS

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1878-2016       |                                              |                                       | EXPERIENCE BAND 1977-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETM<br>RATIO             | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 79.5                           | 4,668,578                                    | 180,891                               | 0.0387                    | 0.9613        | 37.22                            |
| 80.5                           | 4,549,163                                    | 226,317                               | 0.0497                    | 0.9503        | 35.78                            |
| 81.5                           | 4,302,432                                    | 110,961                               | 0.0258                    | 0.9742        | 34.00                            |
| 82.5                           | 4,235,650                                    | 162,147                               | 0.0383                    | 0.9617        | 33.12                            |
| 83.5                           | 4,152,099                                    | 100,413                               | 0.0242                    | 0.9758        | 31.85                            |
| 84.5                           | 4,082,317                                    | 172,954                               | 0.0424                    | 0.9576        | 31.08                            |
| 85.5                           | 3,804,012                                    | 149,884                               | 0.0394                    | 0.9606        | 29.76                            |
| 86.5                           | 3,598,355                                    | 132,606                               | 0.0369                    | 0.9631        | 28.59                            |
| 87.5                           | 3,308,757                                    | 102,237                               | 0.0309                    | 0.9691        | 27.54                            |
| 88.5                           | 3,165,642                                    | 130,225                               | 0.0411                    | 0.9589        | 26.69                            |
| 89.5                           | 3,181,644                                    | 124,694                               | 0.0392                    | 0.9608        | 25.59                            |
| 90.5                           | 3,094,986                                    | 90,887                                | 0.0294                    | 0.9706        | 24.59                            |
| 91.5                           | 2,974,571                                    | 108,387                               | 0.0364                    | 0.9636        | 23.86                            |
| 92.5                           | 2,825,144                                    | 73,635                                | 0.0261                    | 0.9739        | 22.99                            |
| 93.5                           | 2,782,887                                    | 69,088                                | 0.0248                    | 0.9752        | 22.39                            |
| 94.5                           | 2,561,912                                    | 87,891                                | 0.0343                    | 0.9657        | 21.84                            |
| 95.5                           | 2,434,815                                    | 58,839                                | 0.0242                    | 0.9758        | 21.09                            |
| 96.5                           | 2,368,290                                    | 61,172                                | 0.0258                    | 0.9742        | 20.58                            |
| 97.5                           | 2,293,173                                    | 62,374                                | 0.0272                    | 0.9728        | 20.05                            |
| 98.5                           | 2,223,723                                    | 60,799                                | 0.0273                    | 0.9727        | 19.50                            |
| 99.5                           | 2,140,155                                    | 49,821                                | 0.0233                    | 0.9767        | 18.97                            |
| 100.5                          | 2,072,699                                    | 59,751                                | 0.0288                    | 0.9712        | 18.53                            |
| 101.5                          | 1,993,600                                    | 33,827                                | 0.0170                    | 0.9830        | 17.99                            |
| 102.5                          | 1,935,456                                    | 78,579                                | 0.0406                    | 0.9594        | 17.69                            |
| 103.5                          | 1,815,064                                    | 67,807                                | 0.0374                    | 0.9626        | 16.97                            |
| 104.5                          | 1,731,303                                    | 63,094                                | 0.0364                    | 0.9636        | 16.34                            |
| 105.5                          | 1,644,379                                    | 36,819                                | 0.0224                    | 0.9776        | 15.74                            |
| 106.5                          | 1,586,986                                    | 51,027                                | 0.0322                    | 0.9678        | 15.39                            |
| 107.5                          | 1,515,993                                    | 43,040                                | 0.0284                    | 0.9716        | 14.89                            |
| 108.5                          | 1,439,894                                    | 17,160                                | 0.0119                    | 0.9881        | 14.47                            |
| 109.5                          | 1,351,897                                    | 31,370                                | 0.0232                    | 0.9768        | 14.30                            |
| 110.5                          | 1,301,347                                    | 48,149                                | 0.0370                    | 0.9630        | 13.97                            |
| 111.5                          | 1,220,297                                    | 24,436                                | 0.0200                    | 0.9800        | 13.45                            |
| 112.5                          | 1,157,796                                    | 28,320                                | 0.0245                    | 0.9755        | 13.18                            |
| 113.5                          | 1,097,026                                    | 42,701                                | 0.0389                    | 0.9611        | 12.86                            |
| 114.5                          | 1,000,460                                    | 30,679                                | 0.0307                    | 0.9693        | 12.36                            |
| 115.5                          | 925,450                                      | 2,291                                 | 0.0025                    | 0.9975        | 11.98                            |
| 116.5                          | 796,728                                      | 3,244                                 | 0.0041                    | 0.9959        | 11.95                            |
| 117.5                          | 768,677                                      | 3,780                                 | 0.0049                    | 0.9951        | 11.90                            |
| 118.5                          | 699,900                                      | 2,928                                 | 0.0042                    | 0.9958        | 11.84                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 376.1, 376.3 AND 376.45 MAINS

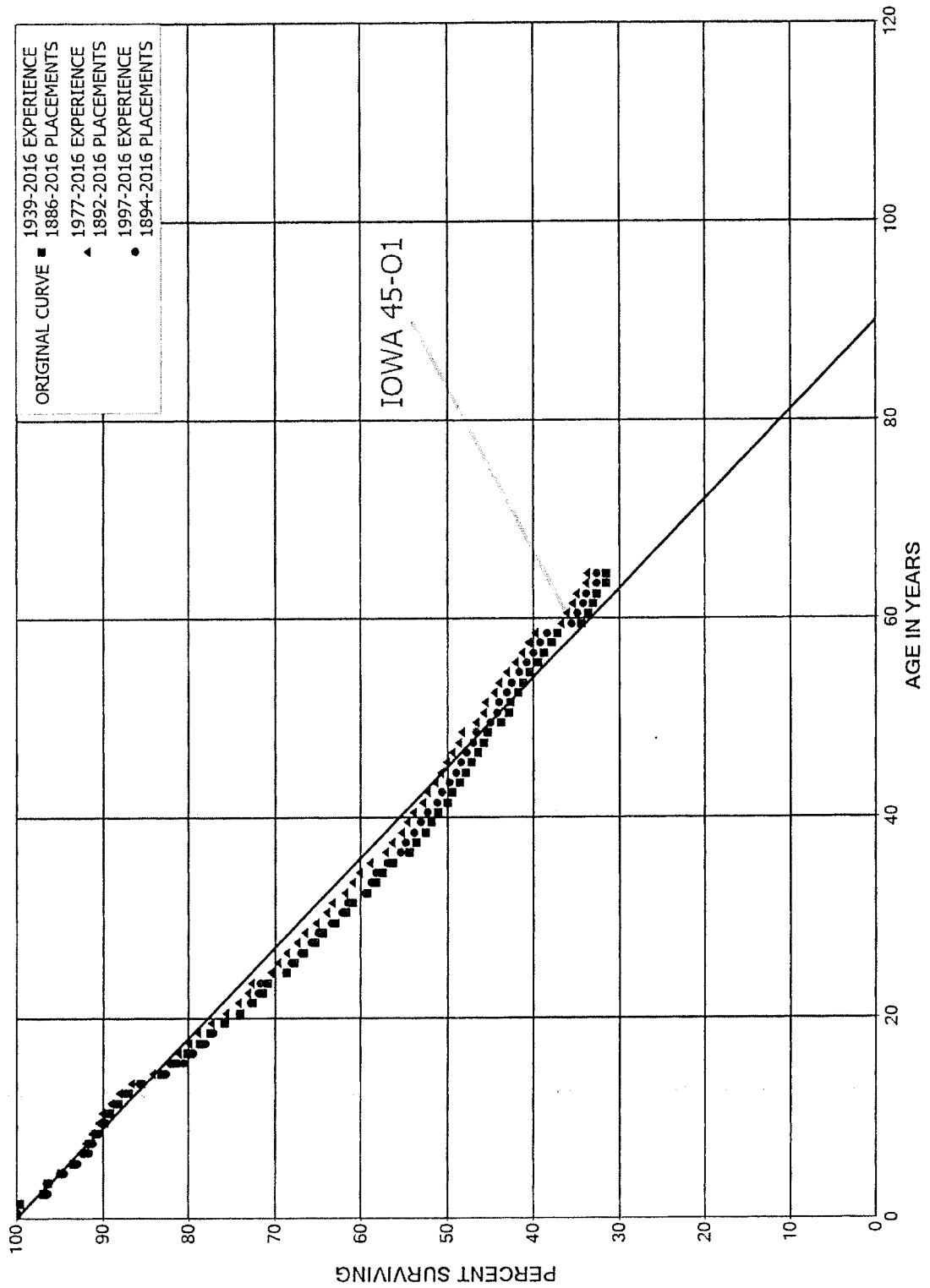
ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1878-2016

EXPERIENCE BAND 1977-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 119.5                          | 684,005                                      | 23,607                                | 0.0345         | 0.9655        | 11.79                            |
| 120.5                          | 573,606                                      | 34,274                                | 0.0598         | 0.9402        | 11.39                            |
| 121.5                          | 536,951                                      | 17,962                                | 0.0335         | 0.9665        | 10.71                            |
| 122.5                          | 480,421                                      | 23,866                                | 0.0497         | 0.9503        | 10.35                            |
| 123.5                          | 401,918                                      | 39,601                                | 0.0985         | 0.9015        | 9.83                             |
| 124.5                          | 346,364                                      | 9,622                                 | 0.0278         | 0.9722        | 8.86                             |
| 125.5                          | 326,347                                      | 2,265                                 | 0.0069         | 0.9931        | 8.62                             |
| 126.5                          | 301,663                                      |                                       | 0.0000         | 1.0000        | 8.56                             |
| 127.5                          | 297,176                                      |                                       | 0.0000         | 1.0000        | 8.56                             |
| 128.5                          | 257,753                                      | 95,118                                | 0.3690         | 0.6310        | 8.56                             |
| 129.5                          | 99,056                                       | 79,586                                | 0.8034         | 0.1966        | 5.40                             |
| 130.5                          | 7,763                                        | 3,689                                 | 0.4751         | 0.5249        | 1.06                             |
| 131.5                          | 4,075                                        | 3,720                                 | 0.9129         | 0.0871        | 0.56                             |
| 132.5                          | 355                                          | 225                                   | 0.6340         | 0.3660        | 0.05                             |
| 133.5                          | 130                                          | 130                                   | 1.0000         |               | 0.02                             |
| 134.5                          |                                              |                                       |                |               |                                  |

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



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE

PLACEMENT BAND 1886-2016

EXPERIENCE BAND 1939-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 0.0                            | 50,613,801                                   | 31,328                                | 0.0006         | 0.9994        | 100.00                           |
| 0.5                            | 37,526,204                                   | 181,697                               | 0.0048         | 0.9952        | 99.94                            |
| 1.5                            | 37,195,473                                   | 984,939                               | 0.0265         | 0.9735        | 99.45                            |
| 2.5                            | 25,562,039                                   | 105,109                               | 0.0041         | 0.9959        | 96.82                            |
| 3.5                            | 22,377,533                                   | 368,972                               | 0.0165         | 0.9835        | 96.42                            |
| 4.5                            | 20,285,415                                   | 307,994                               | 0.0152         | 0.9848        | 94.83                            |
| 5.5                            | 18,741,137                                   | 251,087                               | 0.0134         | 0.9866        | 93.39                            |
| 6.5                            | 17,591,375                                   | 110,925                               | 0.0063         | 0.9937        | 92.14                            |
| 7.5                            | 16,342,723                                   | 138,005                               | 0.0084         | 0.9916        | 91.56                            |
| 8.5                            | 14,922,154                                   | 147,875                               | 0.0099         | 0.9901        | 90.79                            |
| 9.5                            | 14,697,726                                   | 120,494                               | 0.0082         | 0.9918        | 89.89                            |
| 10.5                           | 13,580,068                                   | 147,593                               | 0.0109         | 0.9891        | 89.15                            |
| 11.5                           | 13,147,860                                   | 182,803                               | 0.0139         | 0.9861        | 88.18                            |
| 12.5                           | 12,514,191                                   | 209,517                               | 0.0167         | 0.9833        | 86.96                            |
| 13.5                           | 11,730,398                                   | 316,322                               | 0.0270         | 0.9730        | 85.50                            |
| 14.5                           | 11,246,636                                   | 232,095                               | 0.0206         | 0.9794        | 83.19                            |
| 15.5                           | 10,905,323                                   | 171,289                               | 0.0157         | 0.9843        | 81.48                            |
| 16.5                           | 9,777,360                                    | 183,567                               | 0.0188         | 0.9812        | 80.20                            |
| 17.5                           | 9,230,170                                    | 134,767                               | 0.0146         | 0.9854        | 78.69                            |
| 18.5                           | 8,789,030                                    | 196,002                               | 0.0223         | 0.9777        | 77.54                            |
| 19.5                           | 8,137,754                                    | 182,115                               | 0.0224         | 0.9776        | 75.81                            |
| 20.5                           | 7,538,817                                    | 152,963                               | 0.0203         | 0.9797        | 74.12                            |
| 21.5                           | 7,223,726                                    | 118,512                               | 0.0164         | 0.9836        | 72.61                            |
| 22.5                           | 6,763,456                                    | 57,628                                | 0.0085         | 0.9915        | 71.42                            |
| 23.5                           | 6,514,917                                    | 199,272                               | 0.0306         | 0.9694        | 70.81                            |
| 24.5                           | 6,222,599                                    | 85,836                                | 0.0138         | 0.9862        | 68.65                            |
| 25.5                           | 6,077,185                                    | 96,373                                | 0.0159         | 0.9841        | 67.70                            |
| 26.5                           | 5,734,300                                    | 112,637                               | 0.0196         | 0.9804        | 66.63                            |
| 27.5                           | 5,232,607                                    | 76,399                                | 0.0146         | 0.9854        | 65.32                            |
| 28.5                           | 4,790,013                                    | 106,785                               | 0.0223         | 0.9777        | 64.36                            |
| 29.5                           | 4,475,166                                    | 84,921                                | 0.0190         | 0.9810        | 62.93                            |
| 30.5                           | 4,193,307                                    | 56,891                                | 0.0136         | 0.9864        | 61.74                            |
| 31.5                           | 3,966,917                                    | 104,391                               | 0.0263         | 0.9737        | 60.90                            |
| 32.5                           | 3,915,220                                    | 63,808                                | 0.0163         | 0.9837        | 59.30                            |
| 33.5                           | 3,732,929                                    | 54,894                                | 0.0147         | 0.9853        | 58.33                            |
| 34.5                           | 3,255,655                                    | 68,089                                | 0.0209         | 0.9791        | 57.47                            |
| 35.5                           | 3,041,222                                    | 98,361                                | 0.0323         | 0.9677        | 56.27                            |
| 36.5                           | 2,828,014                                    | 45,536                                | 0.0161         | 0.9839        | 54.45                            |
| 37.5                           | 2,700,494                                    | 54,041                                | 0.0200         | 0.9800        | 53.57                            |
| 38.5                           | 2,594,908                                    | 34,858                                | 0.0134         | 0.9866        | 52.50                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1886-2016

EXPERIENCE BAND 1939-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 39.5                           | 2,528,604                                    | 37,375                                | 0.0148         | 0.9852        | 51.80                            |
| 40.5                           | 2,412,341                                    | 49,832                                | 0.0207         | 0.9793        | 51.03                            |
| 41.5                           | 2,290,799                                    | 25,442                                | 0.0111         | 0.9889        | 49.98                            |
| 42.5                           | 2,182,297                                    | 39,840                                | 0.0183         | 0.9817        | 49.42                            |
| 43.5                           | 2,015,245                                    | 29,939                                | 0.0149         | 0.9851        | 48.52                            |
| 44.5                           | 1,848,227                                    | 25,253                                | 0.0137         | 0.9863        | 47.80                            |
| 45.5                           | 1,645,219                                    | 24,259                                | 0.0147         | 0.9853        | 47.14                            |
| 46.5                           | 1,592,875                                    | 25,123                                | 0.0158         | 0.9842        | 46.45                            |
| 47.5                           | 1,490,060                                    | 12,476                                | 0.0084         | 0.9916        | 45.72                            |
| 48.5                           | 1,485,337                                    | 52,676                                | 0.0355         | 0.9645        | 45.33                            |
| 49.5                           | 1,401,554                                    | 27,598                                | 0.0197         | 0.9803        | 43.73                            |
| 50.5                           | 1,271,326                                    | 6,254                                 | 0.0049         | 0.9951        | 42.87                            |
| 51.5                           | 1,254,828                                    | 27,709                                | 0.0221         | 0.9779        | 42.65                            |
| 52.5                           | 1,200,975                                    | 15,584                                | 0.0130         | 0.9870        | 41.71                            |
| 53.5                           | 1,052,364                                    | 21,117                                | 0.0201         | 0.9799        | 41.17                            |
| 54.5                           | 1,035,915                                    | 23,764                                | 0.0229         | 0.9771        | 40.35                            |
| 55.5                           | 943,213                                      | 17,367                                | 0.0184         | 0.9816        | 39.42                            |
| 56.5                           | 779,384                                      | 16,322                                | 0.0209         | 0.9791        | 38.69                            |
| 57.5                           | 693,818                                      | 12,547                                | 0.0181         | 0.9819        | 37.88                            |
| 58.5                           | 543,874                                      | 41,047                                | 0.0755         | 0.9245        | 37.20                            |
| 59.5                           | 426,800                                      | 9,111                                 | 0.0213         | 0.9787        | 34.39                            |
| 60.5                           | 350,040                                      | 6,658                                 | 0.0190         | 0.9810        | 33.66                            |
| 61.5                           | 241,127                                      | 2,796                                 | 0.0116         | 0.9884        | 33.02                            |
| 62.5                           | 213,242                                      | 7,058                                 | 0.0331         | 0.9669        | 32.63                            |
| 63.5                           | 128,945                                      | 147                                   | 0.0011         | 0.9989        | 31.55                            |
| 64.5                           | 52,963                                       | 64                                    | 0.0012         | 0.9988        | 31.52                            |
| 65.5                           | 31,878                                       | 405                                   | 0.0127         | 0.9873        | 31.48                            |
| 66.5                           | 18,890                                       | 508                                   | 0.0269         | 0.9731        | 31.08                            |
| 67.5                           | 17,179                                       | 712                                   | 0.0415         | 0.9585        | 30.24                            |
| 68.5                           | 15,547                                       | 168                                   | 0.0108         | 0.9892        | 28.99                            |
| 69.5                           | 14,717                                       | 621                                   | 0.0422         | 0.9578        | 28.68                            |
| 70.5                           | 13,782                                       | 31                                    | 0.0022         | 0.9978        | 27.47                            |
| 71.5                           | 12,952                                       | 366                                   | 0.0283         | 0.9717        | 27.40                            |
| 72.5                           | 16,017                                       | 167                                   | 0.0104         | 0.9896        | 26.63                            |
| 73.5                           | 15,718                                       | 145                                   | 0.0092         | 0.9908        | 26.35                            |
| 74.5                           | 9,968                                        | 127                                   | 0.0128         | 0.9872        | 26.11                            |
| 75.5                           | 7,018                                        | 4                                     | 0.0006         | 0.9994        | 25.78                            |
| 76.5                           | 6,047                                        | 243                                   | 0.0401         | 0.9599        | 25.76                            |
| 77.5                           | 4,913                                        | 109                                   | 0.0221         | 0.9779        | 24.73                            |
| 78.5                           | 4,200                                        |                                       | 0.0000         | 1.0000        | 24.18                            |



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1886-2016

EXPERIENCE BAND 1939-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 79.5                           | 4,319                                        |                                       | 0.0000         | 1.0000        | 24.18                            |
| 80.5                           | 4,098                                        |                                       | 0.0000         | 1.0000        | 24.18                            |
| 81.5                           | 4,743                                        | 50                                    | 0.0105         | 0.9895        | 24.18                            |
| 82.5                           | 4,234                                        | 150                                   | 0.0355         | 0.9645        | 23.93                            |
| 83.5                           | 2,608                                        | 168                                   | 0.0643         | 0.9357        | 23.08                            |
| 84.5                           | 1,998                                        |                                       | 0.0000         | 1.0000        | 21.59                            |
| 85.5                           | 1,794                                        | 40                                    | 0.0225         | 0.9775        | 21.59                            |
| 86.5                           | 1,548                                        |                                       | 0.0000         | 1.0000        | 21.11                            |
| 87.5                           | 1,119                                        |                                       | 0.0000         | 1.0000        | 21.11                            |
| 88.5                           | 986                                          |                                       | 0.0000         | 1.0000        | 21.11                            |
| 89.5                           | 986                                          |                                       | 0.0000         | 1.0000        | 21.11                            |
| 90.5                           | 986                                          |                                       | 0.0000         | 1.0000        | 21.11                            |
| 91.5                           | 986                                          |                                       | 0.0000         | 1.0000        | 21.11                            |
| 92.5                           | 986                                          |                                       | 0.0000         | 1.0000        | 21.11                            |
| 93.5                           | 986                                          |                                       | 0.0000         | 1.0000        | 21.11                            |
| 94.5                           | 986                                          |                                       | 0.0000         | 1.0000        | 21.11                            |
| 95.5                           | 986                                          |                                       | 0.0000         | 1.0000        | 21.11                            |
| 96.5                           | 900                                          | 18                                    | 0.0198         | 0.9802        | 21.11                            |
| 97.5                           | 882                                          |                                       | 0.0000         | 1.0000        | 20.69                            |
| 98.5                           | 882                                          |                                       | 0.0000         | 1.0000        | 20.69                            |
| 99.5                           | 882                                          |                                       | 0.0000         | 1.0000        | 20.69                            |
| 100.5                          | 882                                          |                                       | 0.0000         | 1.0000        | 20.69                            |
| 101.5                          | 882                                          |                                       | 0.0000         | 1.0000        | 20.69                            |
| 102.5                          | 795                                          |                                       | 0.0000         | 1.0000        | 20.69                            |
| 103.5                          | 795                                          |                                       | 0.0000         | 1.0000        | 20.69                            |
| 104.5                          | 757                                          |                                       | 0.0000         | 1.0000        | 20.69                            |
| 105.5                          | 757                                          |                                       | 0.0000         | 1.0000        | 20.69                            |
| 106.5                          | 757                                          |                                       | 0.0000         | 1.0000        | 20.69                            |
| 107.5                          | 757                                          |                                       | 0.0000         | 1.0000        | 20.69                            |
| 108.5                          | 757                                          |                                       | 0.0000         | 1.0000        | 20.69                            |
| 109.5                          | 757                                          |                                       | 0.0000         | 1.0000        | 20.69                            |
| 110.5                          | 757                                          |                                       | 0.0000         | 1.0000        | 20.69                            |
| 111.5                          | 761                                          |                                       | 0.0000         | 1.0000        | 20.69                            |
| 112.5                          | 761                                          |                                       | 0.0000         | 1.0000        | 20.69                            |
| 113.5                          | 757                                          |                                       | 0.0000         | 1.0000        | 20.69                            |
| 114.5                          | 757                                          |                                       | 0.0000         | 1.0000        | 20.69                            |
| 115.5                          | 757                                          |                                       | 0.0000         | 1.0000        | 20.69                            |
| 116.5                          | 757                                          |                                       | 0.0000         | 1.0000        | 20.69                            |
| 117.5                          | 757                                          |                                       | 0.0000         | 1.0000        | 20.69                            |
| 118.5                          | 757                                          |                                       | 0.0000         | 1.0000        | 20.69                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1886-2016       |                                              |                                       | EXPERIENCE BAND 1939-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 119.5                          | 757                                          |                                       | 0.0000                    | 1.0000        | 20.69                            |
| 120.5                          | 757                                          |                                       | 0.0000                    | 1.0000        | 20.69                            |
| 121.5                          | 757                                          |                                       | 0.0000                    | 1.0000        | 20.69                            |
| 122.5                          |                                              |                                       |                           |               | 20.69                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE

PLACEMENT BAND 1892-2016

EXPERIENCE BAND 1977-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 0.0                            | 46,898,163                                   |                                       | 0.0000         | 1.0000        | 100.00                           |
| 0.5                            | 33,916,540                                   | 147,812                               | 0.0044         | 0.9956        | 100.00                           |
| 1.5                            | 33,706,969                                   | 943,267                               | 0.0280         | 0.9720        | 99.56                            |
| 2.5                            | 22,221,497                                   | 59,851                                | 0.0027         | 0.9973        | 96.78                            |
| 3.5                            | 19,128,765                                   | 318,601                               | 0.0167         | 0.9833        | 96.52                            |
| 4.5                            | 17,303,127                                   | 249,671                               | 0.0144         | 0.9856        | 94.91                            |
| 5.5                            | 15,911,248                                   | 203,055                               | 0.0128         | 0.9872        | 93.54                            |
| 6.5                            | 14,835,875                                   | 81,854                                | 0.0055         | 0.9945        | 92.35                            |
| 7.5                            | 13,559,551                                   | 90,845                                | 0.0067         | 0.9933        | 91.84                            |
| 8.5                            | 12,193,948                                   | 110,752                               | 0.0091         | 0.9909        | 91.22                            |
| 9.5                            | 11,954,451                                   | 63,456                                | 0.0053         | 0.9947        | 90.39                            |
| 10.5                           | 10,997,934                                   | 116,451                               | 0.0106         | 0.9894        | 89.91                            |
| 11.5                           | 10,657,223                                   | 126,412                               | 0.0119         | 0.9881        | 88.96                            |
| 12.5                           | 10,223,713                                   | 159,214                               | 0.0156         | 0.9844        | 87.91                            |
| 13.5                           | 9,621,094                                    | 280,405                               | 0.0291         | 0.9709        | 86.54                            |
| 14.5                           | 9,350,719                                    | 193,746                               | 0.0207         | 0.9793        | 84.02                            |
| 15.5                           | 9,249,419                                    | 137,520                               | 0.0149         | 0.9851        | 82.27                            |
| 16.5                           | 8,338,193                                    | 126,574                               | 0.0152         | 0.9848        | 81.05                            |
| 17.5                           | 7,997,239                                    | 104,040                               | 0.0130         | 0.9870        | 79.82                            |
| 18.5                           | 7,791,421                                    | 146,796                               | 0.0188         | 0.9812        | 78.78                            |
| 19.5                           | 7,271,866                                    | 155,125                               | 0.0213         | 0.9787        | 77.30                            |
| 20.5                           | 6,774,585                                    | 127,610                               | 0.0188         | 0.9812        | 75.65                            |
| 21.5                           | 6,706,688                                    | 101,044                               | 0.0151         | 0.9849        | 74.22                            |
| 22.5                           | 6,316,237                                    | 44,014                                | 0.0070         | 0.9930        | 73.11                            |
| 23.5                           | 6,162,742                                    | 186,690                               | 0.0303         | 0.9697        | 72.60                            |
| 24.5                           | 6,000,193                                    | 74,397                                | 0.0124         | 0.9876        | 70.40                            |
| 25.5                           | 5,885,115                                    | 85,058                                | 0.0145         | 0.9855        | 69.52                            |
| 26.5                           | 5,575,752                                    | 103,710                               | 0.0186         | 0.9814        | 68.52                            |
| 27.5                           | 5,090,765                                    | 66,775                                | 0.0131         | 0.9869        | 67.24                            |
| 28.5                           | 4,658,949                                    | 94,426                                | 0.0203         | 0.9797        | 66.36                            |
| 29.5                           | 4,356,528                                    | 77,542                                | 0.0178         | 0.9822        | 65.02                            |
| 30.5                           | 4,084,292                                    | 43,025                                | 0.0105         | 0.9895        | 63.86                            |
| 31.5                           | 3,871,933                                    | 92,752                                | 0.0240         | 0.9760        | 63.19                            |
| 32.5                           | 3,832,926                                    | 51,028                                | 0.0133         | 0.9867        | 61.67                            |
| 33.5                           | 3,663,678                                    | 48,280                                | 0.0132         | 0.9868        | 60.85                            |
| 34.5                           | 3,193,802                                    | 61,883                                | 0.0194         | 0.9806        | 60.05                            |
| 35.5                           | 2,988,921                                    | 94,266                                | 0.0315         | 0.9685        | 58.89                            |
| 36.5                           | 2,781,213                                    | 38,542                                | 0.0139         | 0.9861        | 57.03                            |
| 37.5                           | 2,660,024                                    | 49,682                                | 0.0187         | 0.9813        | 56.24                            |
| 38.5                           | 2,558,893                                    | 30,545                                | 0.0119         | 0.9881        | 55.19                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1892-2016

EXPERIENCE BAND 1977-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 39.5                           | 2,496,691                                    | 33,404                                | 0.0134         | 0.9866        | 54.53                            |
| 40.5                           | 2,384,358                                    | 45,911                                | 0.0193         | 0.9807        | 53.80                            |
| 41.5                           | 2,266,682                                    | 23,492                                | 0.0104         | 0.9896        | 52.77                            |
| 42.5                           | 2,160,857                                    | 37,366                                | 0.0173         | 0.9827        | 52.22                            |
| 43.5                           | 1,996,512                                    | 26,603                                | 0.0133         | 0.9867        | 51.32                            |
| 44.5                           | 1,832,235                                    | 23,211                                | 0.0127         | 0.9873        | 50.63                            |
| 45.5                           | 1,633,104                                    | 22,653                                | 0.0139         | 0.9861        | 49.99                            |
| 46.5                           | 1,583,918                                    | 23,868                                | 0.0151         | 0.9849        | 49.30                            |
| 47.5                           | 1,483,014                                    | 11,325                                | 0.0076         | 0.9924        | 48.55                            |
| 48.5                           | 1,479,794                                    | 52,282                                | 0.0353         | 0.9647        | 48.18                            |
| 49.5                           | 1,396,364                                    | 27,496                                | 0.0197         | 0.9803        | 46.48                            |
| 50.5                           | 1,266,107                                    | 5,987                                 | 0.0047         | 0.9953        | 45.57                            |
| 51.5                           | 1,249,861                                    | 27,008                                | 0.0216         | 0.9784        | 45.35                            |
| 52.5                           | 1,196,495                                    | 15,324                                | 0.0128         | 0.9872        | 44.37                            |
| 53.5                           | 1,048,141                                    | 20,888                                | 0.0199         | 0.9801        | 43.80                            |
| 54.5                           | 1,032,048                                    | 23,234                                | 0.0225         | 0.9775        | 42.93                            |
| 55.5                           | 939,695                                      | 17,132                                | 0.0182         | 0.9818        | 41.96                            |
| 56.5                           | 776,104                                      | 15,845                                | 0.0204         | 0.9796        | 41.20                            |
| 57.5                           | 690,815                                      | 12,442                                | 0.0180         | 0.9820        | 40.36                            |
| 58.5                           | 540,829                                      | 40,668                                | 0.0752         | 0.9248        | 39.63                            |
| 59.5                           | 423,886                                      | 8,531                                 | 0.0201         | 0.9799        | 36.65                            |
| 60.5                           | 347,700                                      | 6,353                                 | 0.0183         | 0.9817        | 35.91                            |
| 61.5                           | 239,108                                      | 2,796                                 | 0.0117         | 0.9883        | 35.26                            |
| 62.5                           | 211,326                                      | 7,042                                 | 0.0333         | 0.9667        | 34.84                            |
| 63.5                           | 127,001                                      | 76                                    | 0.0006         | 0.9994        | 33.68                            |
| 64.5                           | 51,128                                       | 31                                    | 0.0006         | 0.9994        | 33.66                            |
| 65.5                           | 29,980                                       | 390                                   | 0.0130         | 0.9870        | 33.64                            |
| 66.5                           | 17,022                                       | 355                                   | 0.0209         | 0.9791        | 33.20                            |
| 67.5                           | 15,502                                       | 236                                   | 0.0152         | 0.9848        | 32.51                            |
| 68.5                           | 14,335                                       | 168                                   | 0.0117         | 0.9883        | 32.02                            |
| 69.5                           | 13,542                                       | 583                                   | 0.0431         | 0.9569        | 31.64                            |
| 70.5                           | 12,693                                       | 15                                    | 0.0012         | 0.9988        | 30.28                            |
| 71.5                           | 11,878                                       | 350                                   | 0.0294         | 0.9706        | 30.24                            |
| 72.5                           | 14,959                                       | 152                                   | 0.0102         | 0.9898        | 29.35                            |
| 73.5                           | 14,675                                       | 145                                   | 0.0099         | 0.9901        | 29.05                            |
| 74.5                           | 8,925                                        | 127                                   | 0.0143         | 0.9857        | 28.77                            |
| 75.5                           | 5,975                                        | 4                                     | 0.0007         | 0.9993        | 28.36                            |
| 76.5                           | 5,273                                        | 243                                   | 0.0460         | 0.9540        | 28.34                            |
| 77.5                           | 4,138                                        | 109                                   | 0.0262         | 0.9738        | 27.03                            |
| 78.5                           | 3,410                                        |                                       | 0.0000         | 1.0000        | 26.32                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1892-2016       |                                              |                                       | EXPERIENCE BAND 1977-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 79.5                           | 3,529                                        |                                       | 0.0000                    | 1.0000        | 26.32                            |
| 80.5                           | 3,308                                        |                                       | 0.0000                    | 1.0000        | 26.32                            |
| 81.5                           | 3,953                                        | 50                                    | 0.0126                    | 0.9874        | 26.32                            |
| 82.5                           | 4,200                                        | 150                                   | 0.0358                    | 0.9642        | 25.99                            |
| 83.5                           | 2,575                                        | 168                                   | 0.0652                    | 0.9348        | 25.06                            |
| 84.5                           | 1,982                                        |                                       | 0.0000                    | 1.0000        | 23.43                            |
| 85.5                           | 1,794                                        | 40                                    | 0.0225                    | 0.9775        | 23.43                            |
| 86.5                           | 1,548                                        |                                       | 0.0000                    | 1.0000        | 22.90                            |
| 87.5                           | 1,119                                        |                                       | 0.0000                    | 1.0000        | 22.90                            |
| 88.5                           | 986                                          |                                       | 0.0000                    | 1.0000        | 22.90                            |
| 89.5                           | 986                                          |                                       | 0.0000                    | 1.0000        | 22.90                            |
| 90.5                           | 986                                          |                                       | 0.0000                    | 1.0000        | 22.90                            |
| 91.5                           | 986                                          |                                       | 0.0000                    | 1.0000        | 22.90                            |
| 92.5                           | 986                                          |                                       | 0.0000                    | 1.0000        | 22.90                            |
| 93.5                           | 986                                          |                                       | 0.0000                    | 1.0000        | 22.90                            |
| 94.5                           | 986                                          |                                       | 0.0000                    | 1.0000        | 22.90                            |
| 95.5                           | 986                                          |                                       | 0.0000                    | 1.0000        | 22.90                            |
| 96.5                           | 900                                          | 18                                    | 0.0198                    | 0.9802        | 22.90                            |
| 97.5                           | 882                                          |                                       | 0.0000                    | 1.0000        | 22.45                            |
| 98.5                           | 882                                          |                                       | 0.0000                    | 1.0000        | 22.45                            |
| 99.5                           | 882                                          |                                       | 0.0000                    | 1.0000        | 22.45                            |
| 100.5                          | 882                                          |                                       | 0.0000                    | 1.0000        | 22.45                            |
| 101.5                          | 882                                          |                                       | 0.0000                    | 1.0000        | 22.45                            |
| 102.5                          | 795                                          |                                       | 0.0000                    | 1.0000        | 22.45                            |
| 103.5                          | 795                                          |                                       | 0.0000                    | 1.0000        | 22.45                            |
| 104.5                          | 757                                          |                                       | 0.0000                    | 1.0000        | 22.45                            |
| 105.5                          | 757                                          |                                       | 0.0000                    | 1.0000        | 22.45                            |
| 106.5                          | 757                                          |                                       | 0.0000                    | 1.0000        | 22.45                            |
| 107.5                          | 757                                          |                                       | 0.0000                    | 1.0000        | 22.45                            |
| 108.5                          | 757                                          |                                       | 0.0000                    | 1.0000        | 22.45                            |
| 109.5                          | 757                                          |                                       | 0.0000                    | 1.0000        | 22.45                            |
| 110.5                          | 757                                          |                                       | 0.0000                    | 1.0000        | 22.45                            |
| 111.5                          | 761                                          |                                       | 0.0000                    | 1.0000        | 22.45                            |
| 112.5                          | 761                                          |                                       | 0.0000                    | 1.0000        | 22.45                            |
| 113.5                          | 757                                          |                                       | 0.0000                    | 1.0000        | 22.45                            |
| 114.5                          | 757                                          |                                       | 0.0000                    | 1.0000        | 22.45                            |
| 115.5                          | 757                                          |                                       | 0.0000                    | 1.0000        | 22.45                            |
| 116.5                          | 757                                          |                                       | 0.0000                    | 1.0000        | 22.45                            |
| 117.5                          | 757                                          |                                       | 0.0000                    | 1.0000        | 22.45                            |
| 118.5                          | 757                                          |                                       | 0.0000                    | 1.0000        | 22.45                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1892-2016       |                                              |                                       | EXPERIENCE BAND 1977-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 119.5                          | 757                                          |                                       | 0.0000                    | 1.0000        | 22.45                            |
| 120.5                          | 757                                          |                                       | 0.0000                    | 1.0000        | 22.45                            |
| 121.5                          | 757                                          |                                       | 0.0000                    | 1.0000        | 22.45                            |
| 122.5                          |                                              |                                       |                           |               | 22.45                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE

PLACEMENT BAND 1894-2016

EXPERIENCE BAND 1997-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 0.0                            | 41,403,576                                   |                                       | 0.0000         | 1.0000        | 100.00                           |
| 0.5                            | 28,951,973                                   | 137,077                               | 0.0047         | 0.9953        | 100.00                           |
| 1.5                            | 28,874,718                                   | 911,984                               | 0.0316         | 0.9684        | 99.53                            |
| 2.5                            | 17,593,003                                   | 27,187                                | 0.0015         | 0.9985        | 96.38                            |
| 3.5                            | 14,556,675                                   | 269,267                               | 0.0185         | 0.9815        | 96.23                            |
| 4.5                            | 12,728,240                                   | 194,905                               | 0.0153         | 0.9847        | 94.45                            |
| 5.5                            | 11,373,322                                   | 166,605                               | 0.0146         | 0.9854        | 93.01                            |
| 6.5                            | 10,544,983                                   | 57,303                                | 0.0054         | 0.9946        | 91.65                            |
| 7.5                            | 9,441,892                                    | 64,484                                | 0.0068         | 0.9932        | 91.15                            |
| 8.5                            | 8,604,211                                    | 70,958                                | 0.0082         | 0.9918        | 90.52                            |
| 9.5                            | 8,556,660                                    | 41,523                                | 0.0049         | 0.9951        | 89.78                            |
| 10.5                           | 7,814,058                                    | 78,960                                | 0.0101         | 0.9899        | 89.34                            |
| 11.5                           | 7,738,501                                    | 95,464                                | 0.0123         | 0.9877        | 88.44                            |
| 12.5                           | 7,417,349                                    | 136,155                               | 0.0184         | 0.9816        | 87.35                            |
| 13.5                           | 6,865,797                                    | 254,960                               | 0.0371         | 0.9629        | 85.75                            |
| 14.5                           | 6,743,253                                    | 161,660                               | 0.0240         | 0.9760        | 82.56                            |
| 15.5                           | 6,621,026                                    | 91,630                                | 0.0138         | 0.9862        | 80.58                            |
| 16.5                           | 5,667,576                                    | 97,382                                | 0.0172         | 0.9828        | 79.47                            |
| 17.5                           | 5,287,777                                    | 59,814                                | 0.0113         | 0.9887        | 78.10                            |
| 18.5                           | 4,979,509                                    | 88,858                                | 0.0178         | 0.9822        | 77.22                            |
| 19.5                           | 4,525,855                                    | 102,070                               | 0.0226         | 0.9774        | 75.84                            |
| 20.5                           | 4,124,281                                    | 72,125                                | 0.0175         | 0.9825        | 74.13                            |
| 21.5                           | 4,019,189                                    | 46,942                                | 0.0117         | 0.9883        | 72.83                            |
| 22.5                           | 3,789,084                                    | 12,058                                | 0.0032         | 0.9968        | 71.98                            |
| 23.5                           | 3,727,402                                    | 156,690                               | 0.0420         | 0.9580        | 71.75                            |
| 24.5                           | 3,633,350                                    | 38,112                                | 0.0105         | 0.9895        | 68.74                            |
| 25.5                           | 3,753,524                                    | 57,776                                | 0.0154         | 0.9846        | 68.02                            |
| 26.5                           | 3,496,850                                    | 65,648                                | 0.0188         | 0.9812        | 66.97                            |
| 27.5                           | 3,141,614                                    | 36,940                                | 0.0118         | 0.9882        | 65.71                            |
| 28.5                           | 2,798,878                                    | 64,353                                | 0.0230         | 0.9770        | 64.94                            |
| 29.5                           | 2,595,495                                    | 50,497                                | 0.0195         | 0.9805        | 63.45                            |
| 30.5                           | 2,454,565                                    | 26,330                                | 0.0107         | 0.9893        | 62.21                            |
| 31.5                           | 2,329,129                                    | 76,878                                | 0.0330         | 0.9670        | 61.54                            |
| 32.5                           | 2,428,769                                    | 26,578                                | 0.0109         | 0.9891        | 59.51                            |
| 33.5                           | 2,399,180                                    | 25,596                                | 0.0107         | 0.9893        | 58.86                            |
| 34.5                           | 2,108,141                                    | 44,355                                | 0.0210         | 0.9790        | 58.23                            |
| 35.5                           | 2,057,197                                    | 57,754                                | 0.0281         | 0.9719        | 57.01                            |
| 36.5                           | 1,993,430                                    | 19,183                                | 0.0096         | 0.9904        | 55.41                            |
| 37.5                           | 1,977,848                                    | 39,296                                | 0.0199         | 0.9801        | 54.87                            |
| 38.5                           | 1,979,050                                    | 26,258                                | 0.0133         | 0.9867        | 53.78                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1894-2016

EXPERIENCE BAND 1997-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 39.5                           | 1,988,356                                    | 30,894                                | 0.0155         | 0.9845        | 53.07                            |
| 40.5                           | 1,939,930                                    | 39,165                                | 0.0202         | 0.9798        | 52.25                            |
| 41.5                           | 2,009,348                                    | 21,888                                | 0.0109         | 0.9891        | 51.19                            |
| 42.5                           | 1,948,962                                    | 35,525                                | 0.0182         | 0.9818        | 50.63                            |
| 43.5                           | 1,857,108                                    | 26,261                                | 0.0141         | 0.9859        | 49.71                            |
| 44.5                           | 1,771,908                                    | 22,831                                | 0.0129         | 0.9871        | 49.01                            |
| 45.5                           | 1,589,932                                    | 21,971                                | 0.0138         | 0.9862        | 48.38                            |
| 46.5                           | 1,557,875                                    | 23,695                                | 0.0152         | 0.9848        | 47.71                            |
| 47.5                           | 1,460,147                                    | 11,075                                | 0.0076         | 0.9924        | 46.98                            |
| 48.5                           | 1,458,435                                    | 51,252                                | 0.0351         | 0.9649        | 46.63                            |
| 49.5                           | 1,376,877                                    | 25,609                                | 0.0186         | 0.9814        | 44.99                            |
| 50.5                           | 1,249,083                                    | 5,282                                 | 0.0042         | 0.9958        | 44.15                            |
| 51.5                           | 1,234,029                                    | 26,494                                | 0.0215         | 0.9785        | 43.96                            |
| 52.5                           | 1,183,164                                    | 15,123                                | 0.0128         | 0.9872        | 43.02                            |
| 53.5                           | 1,035,913                                    | 20,345                                | 0.0196         | 0.9804        | 42.47                            |
| 54.5                           | 1,021,062                                    | 23,140                                | 0.0227         | 0.9773        | 41.64                            |
| 55.5                           | 931,906                                      | 16,998                                | 0.0182         | 0.9818        | 40.69                            |
| 56.5                           | 769,561                                      | 15,842                                | 0.0206         | 0.9794        | 39.95                            |
| 57.5                           | 685,671                                      | 12,442                                | 0.0181         | 0.9819        | 39.13                            |
| 58.5                           | 536,708                                      | 40,668                                | 0.0758         | 0.9242        | 38.42                            |
| 59.5                           | 419,901                                      | 8,531                                 | 0.0203         | 0.9797        | 35.51                            |
| 60.5                           | 343,976                                      | 6,350                                 | 0.0185         | 0.9815        | 34.79                            |
| 61.5                           | 235,655                                      | 2,499                                 | 0.0106         | 0.9894        | 34.14                            |
| 62.5                           | 208,544                                      | 6,977                                 | 0.0335         | 0.9665        | 33.78                            |
| 63.5                           | 124,845                                      | 76                                    | 0.0006         | 0.9994        | 32.65                            |
| 64.5                           | 49,643                                       | 31                                    | 0.0006         | 0.9994        | 32.63                            |
| 65.5                           | 28,697                                       | 387                                   | 0.0135         | 0.9865        | 32.61                            |
| 66.5                           | 15,934                                       | 355                                   | 0.0223         | 0.9777        | 32.17                            |
| 67.5                           | 14,978                                       | 236                                   | 0.0158         | 0.9842        | 31.45                            |
| 68.5                           | 13,943                                       | 168                                   | 0.0121         | 0.9879        | 30.96                            |
| 69.5                           | 13,150                                       | 583                                   | 0.0444         | 0.9556        | 30.58                            |
| 70.5                           | 12,409                                       |                                       | 0.0000         | 1.0000        | 29.23                            |
| 71.5                           | 11,609                                       | 350                                   | 0.0301         | 0.9699        | 29.23                            |
| 72.5                           | 14,690                                       | 152                                   | 0.0104         | 0.9896        | 28.35                            |
| 73.5                           | 14,406                                       | 130                                   | 0.0090         | 0.9910        | 28.05                            |
| 74.5                           | 8,671                                        | 127                                   | 0.0147         | 0.9853        | 27.80                            |
| 75.5                           | 5,721                                        |                                       | 0.0000         | 1.0000        | 27.39                            |
| 76.5                           | 4,841                                        | 243                                   | 0.0501         | 0.9499        | 27.39                            |
| 77.5                           | 3,944                                        | 109                                   | 0.0275         | 0.9725        | 26.02                            |
| 78.5                           | 3,215                                        |                                       | 0.0000         | 1.0000        | 25.30                            |



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1894-2016

EXPERIENCE BAND 1997-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 79.5                           | 3,335                                        |                                       | 0.0000         | 1.0000        | 25.30                            |
| 80.5                           | 3,114                                        |                                       | 0.0000         | 1.0000        | 25.30                            |
| 81.5                           | 3,759                                        | 50                                    | 0.0132         | 0.9868        | 25.30                            |
| 82.5                           | 3,336                                        | 81                                    | 0.0244         | 0.9756        | 24.97                            |
| 83.5                           | 1,780                                        | 168                                   | 0.0943         | 0.9057        | 24.36                            |
| 84.5                           | 1,208                                        |                                       | 0.0000         | 1.0000        | 22.06                            |
| 85.5                           | 1,019                                        | 40                                    | 0.0396         | 0.9604        | 22.06                            |
| 86.5                           | 773                                          |                                       | 0.0000         | 1.0000        | 21.19                            |
| 87.5                           | 345                                          |                                       | 0.0000         | 1.0000        | 21.19                            |
| 88.5                           | 212                                          |                                       | 0.0000         | 1.0000        | 21.19                            |
| 89.5                           | 212                                          |                                       | 0.0000         | 1.0000        | 21.19                            |
| 90.5                           | 212                                          |                                       | 0.0000         | 1.0000        | 21.19                            |
| 91.5                           | 212                                          |                                       | 0.0000         | 1.0000        | 21.19                            |
| 92.5                           | 212                                          |                                       | 0.0000         | 1.0000        | 21.19                            |
| 93.5                           | 212                                          |                                       | 0.0000         | 1.0000        | 21.19                            |
| 94.5                           | 212                                          |                                       | 0.0000         | 1.0000        | 21.19                            |
| 95.5                           | 212                                          |                                       | 0.0000         | 1.0000        | 21.19                            |
| 96.5                           | 126                                          |                                       | 0.0000         | 1.0000        | 21.19                            |
| 97.5                           | 126                                          |                                       | 0.0000         | 1.0000        | 21.19                            |
| 98.5                           | 126                                          |                                       | 0.0000         | 1.0000        | 21.19                            |
| 99.5                           | 126                                          |                                       | 0.0000         | 1.0000        | 21.19                            |
| 100.5                          | 126                                          |                                       | 0.0000         | 1.0000        | 21.19                            |
| 101.5                          | 126                                          |                                       | 0.0000         | 1.0000        | 21.19                            |
| 102.5                          | 795                                          |                                       | 0.0000         | 1.0000        | 21.19                            |
| 103.5                          | 795                                          |                                       | 0.0000         | 1.0000        | 21.19                            |
| 104.5                          | 757                                          |                                       | 0.0000         | 1.0000        | 21.19                            |
| 105.5                          | 757                                          |                                       | 0.0000         | 1.0000        | 21.19                            |
| 106.5                          | 757                                          |                                       | 0.0000         | 1.0000        | 21.19                            |
| 107.5                          | 757                                          |                                       | 0.0000         | 1.0000        | 21.19                            |
| 108.5                          | 757                                          |                                       | 0.0000         | 1.0000        | 21.19                            |
| 109.5                          | 757                                          |                                       | 0.0000         | 1.0000        | 21.19                            |
| 110.5                          | 757                                          |                                       | 0.0000         | 1.0000        | 21.19                            |
| 111.5                          | 761                                          |                                       | 0.0000         | 1.0000        | 21.19                            |
| 112.5                          | 761                                          |                                       | 0.0000         | 1.0000        | 21.19                            |
| 113.5                          | 757                                          |                                       | 0.0000         | 1.0000        | 21.19                            |
| 114.5                          | 757                                          |                                       | 0.0000         | 1.0000        | 21.19                            |
| 115.5                          | 757                                          |                                       | 0.0000         | 1.0000        | 21.19                            |
| 116.5                          | 757                                          |                                       | 0.0000         | 1.0000        | 21.19                            |
| 117.5                          | 757                                          |                                       | 0.0000         | 1.0000        | 21.19                            |
| 118.5                          | 757                                          |                                       | 0.0000         | 1.0000        | 21.19                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING EQUIPMENT - GENERAL

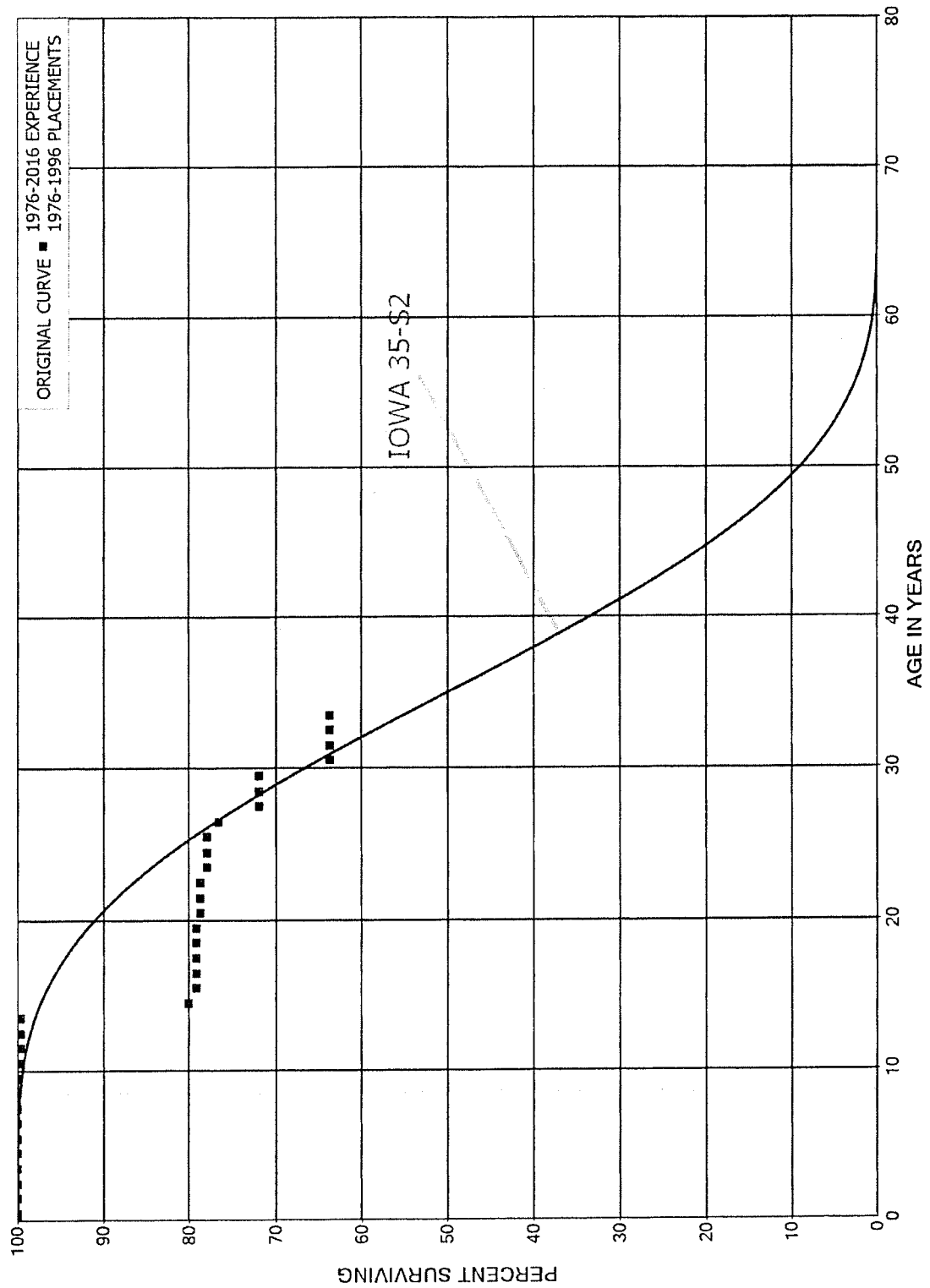
ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1894-2016

EXPERIENCE BAND 1997-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 119.5                          | 757                                          |                                       | 0.0000         | 1.0000        | 21.19                            |
| 120.5                          | 757                                          |                                       | 0.0000         | 1.0000        | 21.19                            |
| 121.5                          | 757                                          |                                       | 0.0000         | 1.0000        | 21.19                            |
| 122.5                          |                                              |                                       |                |               | 21.19                            |

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



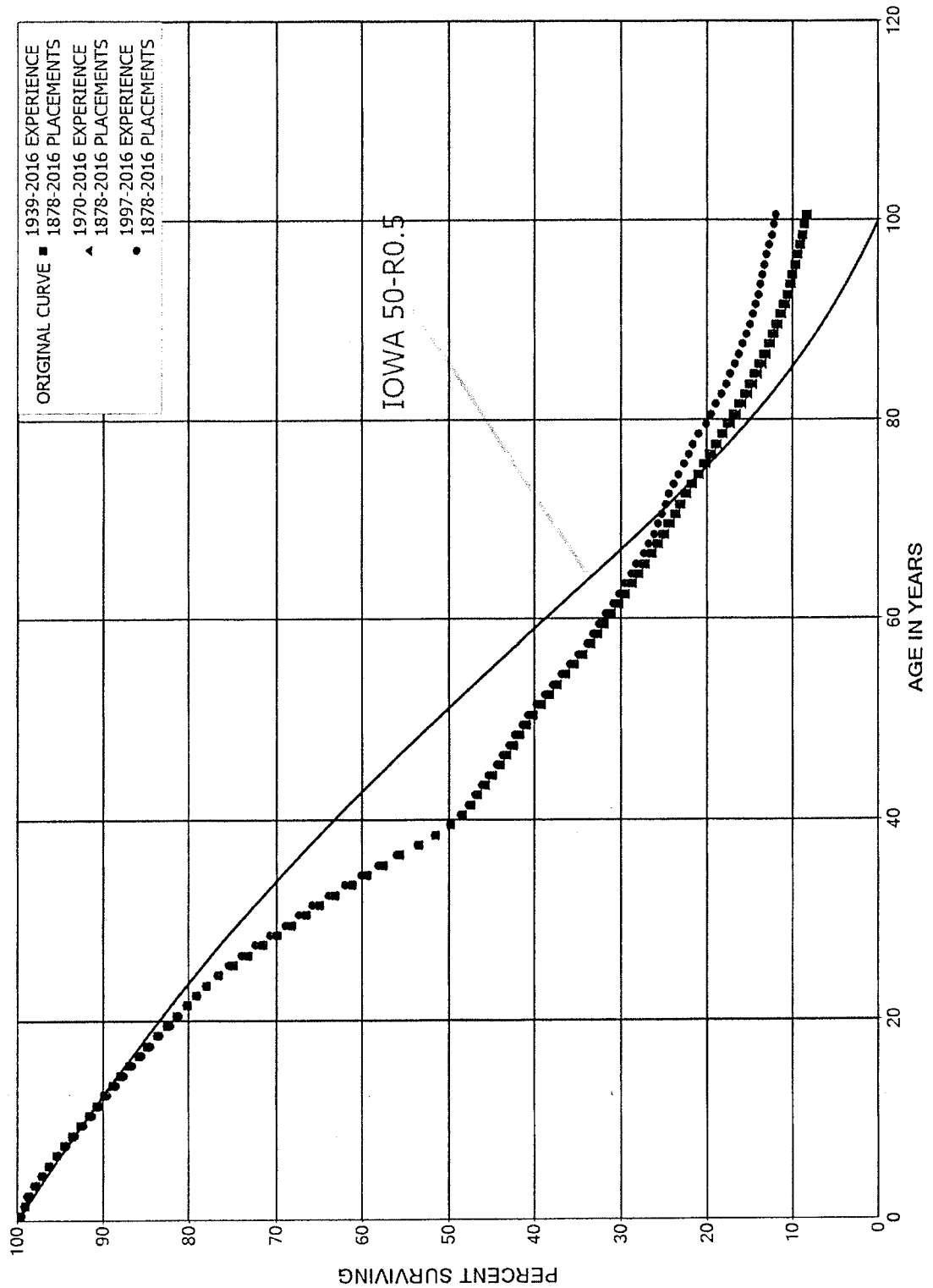
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 379.1 MEASURING AND REGULATING EQUIPMENT - CITY GATE

ORIGINAL LIFE TABLE

| PLACEMENT BAND 1976-1996       |                                              |                                       | EXPERIENCE BAND 1976-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>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                           | 155,579                                      |                                       | 0.0000                    | 1.0000        | 79.13                            |
| 16.5                           | 155,579                                      |                                       | 0.0000                    | 1.0000        | 79.13                            |
| 17.5                           | 155,579                                      |                                       | 0.0000                    | 1.0000        | 79.13                            |
| 18.5                           | 155,579                                      |                                       | 0.0000                    | 1.0000        | 79.13                            |
| 19.5                           | 155,579                                      | 744                                   | 0.0048                    | 0.9952        | 79.13                            |
| 20.5                           | 106,758                                      |                                       | 0.0000                    | 1.0000        | 78.75                            |
| 21.5                           | 106,758                                      |                                       | 0.0000                    | 1.0000        | 78.75                            |
| 22.5                           | 106,758                                      | 1,041                                 | 0.0098                    | 0.9902        | 78.75                            |
| 23.5                           | 105,717                                      |                                       | 0.0000                    | 1.0000        | 77.98                            |
| 24.5                           | 105,717                                      |                                       | 0.0000                    | 1.0000        | 77.98                            |
| 25.5                           | 105,717                                      | 1,808                                 | 0.0171                    | 0.9829        | 77.98                            |
| 26.5                           | 103,909                                      | 6,424                                 | 0.0618                    | 0.9382        | 76.65                            |
| 27.5                           | 62,461                                       |                                       | 0.0000                    | 1.0000        | 71.91                            |
| 28.5                           | 46,554                                       |                                       | 0.0000                    | 1.0000        | 71.91                            |
| 29.5                           | 39,077                                       | 4,445                                 | 0.1138                    | 0.8862        | 71.91                            |
| 30.5                           | 34,632                                       |                                       | 0.0000                    | 1.0000        | 63.73                            |
| 31.5                           | 34,632                                       |                                       | 0.0000                    | 1.0000        | 63.73                            |
| 32.5                           | 33,104                                       |                                       | 0.0000                    | 1.0000        | 63.73                            |
| 33.5                           | 591                                          |                                       | 0.0000                    | 1.0000        | 63.73                            |
| 34.5                           | 591                                          |                                       | 0.0000                    | 1.0000        | 63.73                            |
| 35.5                           | 591                                          |                                       | 0.0000                    | 1.0000        | 63.73                            |
| 36.5                           | 591                                          |                                       | 0.0000                    | 1.0000        | 63.73                            |
| 37.5                           | 591                                          |                                       | 0.0000                    | 1.0000        | 63.73                            |
| 38.5                           | 591                                          |                                       | 0.0000                    | 1.0000        | 63.73                            |
| 39.5                           | 591                                          |                                       | 0.0000                    | 1.0000        | 63.73                            |
| 40.5                           |                                              |                                       |                           |               | 63.73                            |

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 1878-2016

EXPERIENCE BAND 1939-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 0.0                            | 515,869,202                                  | 2,156,505                             | 0.0042         | 0.9958        | 100.00                           |
| 0.5                            | 480,433,394                                  | 2,474,995                             | 0.0052         | 0.9948        | 99.58                            |
| 1.5                            | 435,319,098                                  | 2,036,594                             | 0.0047         | 0.9953        | 99.07                            |
| 2.5                            | 396,051,348                                  | 2,914,293                             | 0.0074         | 0.9926        | 98.61                            |
| 3.5                            | 357,431,531                                  | 2,840,175                             | 0.0079         | 0.9921        | 97.88                            |
| 4.5                            | 324,781,683                                  | 2,782,090                             | 0.0086         | 0.9914        | 97.10                            |
| 5.5                            | 298,310,405                                  | 2,752,123                             | 0.0092         | 0.9908        | 96.27                            |
| 6.5                            | 279,225,073                                  | 2,691,367                             | 0.0096         | 0.9904        | 95.38                            |
| 7.5                            | 262,462,143                                  | 2,447,465                             | 0.0093         | 0.9907        | 94.46                            |
| 8.5                            | 244,937,159                                  | 2,521,797                             | 0.0103         | 0.9897        | 93.58                            |
| 9.5                            | 229,665,043                                  | 2,372,560                             | 0.0103         | 0.9897        | 92.62                            |
| 10.5                           | 218,094,729                                  | 2,156,847                             | 0.0099         | 0.9901        | 91.66                            |
| 11.5                           | 206,553,221                                  | 2,109,614                             | 0.0102         | 0.9898        | 90.76                            |
| 12.5                           | 195,754,656                                  | 2,125,110                             | 0.0109         | 0.9891        | 89.83                            |
| 13.5                           | 187,569,248                                  | 1,995,615                             | 0.0106         | 0.9894        | 88.85                            |
| 14.5                           | 179,149,140                                  | 2,057,350                             | 0.0115         | 0.9885        | 87.91                            |
| 15.5                           | 169,763,651                                  | 2,100,853                             | 0.0124         | 0.9876        | 86.90                            |
| 16.5                           | 159,972,605                                  | 1,881,683                             | 0.0118         | 0.9882        | 85.82                            |
| 17.5                           | 150,510,078                                  | 2,077,471                             | 0.0138         | 0.9862        | 84.81                            |
| 18.5                           | 141,230,817                                  | 1,949,921                             | 0.0138         | 0.9862        | 83.64                            |
| 19.5                           | 132,518,836                                  | 1,762,373                             | 0.0133         | 0.9867        | 82.49                            |
| 20.5                           | 124,392,755                                  | 1,775,286                             | 0.0143         | 0.9857        | 81.39                            |
| 21.5                           | 115,940,399                                  | 1,597,289                             | 0.0138         | 0.9862        | 80.23                            |
| 22.5                           | 107,137,238                                  | 1,554,193                             | 0.0145         | 0.9855        | 79.12                            |
| 23.5                           | 99,491,096                                   | 1,931,734                             | 0.0194         | 0.9806        | 77.98                            |
| 24.5                           | 91,727,722                                   | 1,950,833                             | 0.0213         | 0.9787        | 76.46                            |
| 25.5                           | 84,695,193                                   | 1,881,804                             | 0.0222         | 0.9778        | 74.84                            |
| 26.5                           | 77,382,903                                   | 1,719,134                             | 0.0222         | 0.9778        | 73.17                            |
| 27.5                           | 70,447,738                                   | 1,673,738                             | 0.0238         | 0.9762        | 71.55                            |
| 28.5                           | 63,360,245                                   | 1,552,523                             | 0.0245         | 0.9755        | 69.85                            |
| 29.5                           | 57,309,825                                   | 1,338,008                             | 0.0233         | 0.9767        | 68.14                            |
| 30.5                           | 52,066,009                                   | 1,270,195                             | 0.0244         | 0.9756        | 66.55                            |
| 31.5                           | 47,361,594                                   | 1,278,605                             | 0.0270         | 0.9730        | 64.92                            |
| 32.5                           | 43,049,252                                   | 1,344,952                             | 0.0312         | 0.9688        | 63.17                            |
| 33.5                           | 39,105,769                                   | 1,160,170                             | 0.0297         | 0.9703        | 61.20                            |
| 34.5                           | 35,122,746                                   | 1,099,325                             | 0.0313         | 0.9687        | 59.38                            |
| 35.5                           | 30,720,370                                   | 1,035,300                             | 0.0337         | 0.9663        | 57.52                            |
| 36.5                           | 26,670,697                                   | 1,062,003                             | 0.0398         | 0.9602        | 55.58                            |
| 37.5                           | 23,521,844                                   | 816,252                               | 0.0347         | 0.9653        | 53.37                            |
| 38.5                           | 21,068,000                                   | 738,844                               | 0.0351         | 0.9649        | 51.52                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 380.3 AND 380.45 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1878-2016

EXPERIENCE BAND 1939-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 39.5                           | 18,105,191                                   | 482,512                               | 0.0267         | 0.9733        | 49.71                            |
| 40.5                           | 17,013,875                                   | 330,325                               | 0.0194         | 0.9806        | 48.39                            |
| 41.5                           | 16,488,072                                   | 295,547                               | 0.0179         | 0.9821        | 47.45                            |
| 42.5                           | 16,071,143                                   | 318,814                               | 0.0198         | 0.9802        | 46.60                            |
| 43.5                           | 15,231,075                                   | 279,156                               | 0.0183         | 0.9817        | 45.67                            |
| 44.5                           | 14,283,094                                   | 294,665                               | 0.0206         | 0.9794        | 44.84                            |
| 45.5                           | 13,332,487                                   | 235,943                               | 0.0177         | 0.9823        | 43.91                            |
| 46.5                           | 12,379,873                                   | 209,980                               | 0.0170         | 0.9830        | 43.13                            |
| 47.5                           | 11,411,766                                   | 196,908                               | 0.0173         | 0.9827        | 42.40                            |
| 48.5                           | 10,226,605                                   | 207,519                               | 0.0203         | 0.9797        | 41.67                            |
| 49.5                           | 9,081,970                                    | 166,471                               | 0.0183         | 0.9817        | 40.82                            |
| 50.5                           | 8,004,443                                    | 191,875                               | 0.0240         | 0.9760        | 40.08                            |
| 51.5                           | 7,160,536                                    | 181,158                               | 0.0253         | 0.9747        | 39.12                            |
| 52.5                           | 6,297,739                                    | 146,865                               | 0.0233         | 0.9767        | 38.13                            |
| 53.5                           | 5,474,045                                    | 134,435                               | 0.0246         | 0.9754        | 37.24                            |
| 54.5                           | 4,749,699                                    | 130,588                               | 0.0275         | 0.9725        | 36.32                            |
| 55.5                           | 4,034,017                                    | 119,093                               | 0.0295         | 0.9705        | 35.32                            |
| 56.5                           | 3,417,963                                    | 91,657                                | 0.0268         | 0.9732        | 34.28                            |
| 57.5                           | 2,857,898                                    | 62,882                                | 0.0220         | 0.9780        | 33.36                            |
| 58.5                           | 2,428,791                                    | 58,484                                | 0.0241         | 0.9759        | 32.63                            |
| 59.5                           | 2,095,245                                    | 53,142                                | 0.0254         | 0.9746        | 31.84                            |
| 60.5                           | 1,750,782                                    | 46,879                                | 0.0268         | 0.9732        | 31.03                            |
| 61.5                           | 1,473,385                                    | 35,972                                | 0.0244         | 0.9756        | 30.20                            |
| 62.5                           | 1,282,290                                    | 32,719                                | 0.0255         | 0.9745        | 29.47                            |
| 63.5                           | 1,151,696                                    | 30,059                                | 0.0261         | 0.9739        | 28.71                            |
| 64.5                           | 1,016,964                                    | 26,246                                | 0.0258         | 0.9742        | 27.96                            |
| 65.5                           | 892,179                                      | 26,104                                | 0.0293         | 0.9707        | 27.24                            |
| 66.5                           | 788,538                                      | 20,454                                | 0.0259         | 0.9741        | 26.45                            |
| 67.5                           | 708,345                                      | 18,832                                | 0.0266         | 0.9734        | 25.76                            |
| 68.5                           | 649,321                                      | 16,140                                | 0.0249         | 0.9751        | 25.07                            |
| 69.5                           | 602,322                                      | 16,793                                | 0.0279         | 0.9721        | 24.45                            |
| 70.5                           | 568,930                                      | 15,340                                | 0.0270         | 0.9730        | 23.77                            |
| 71.5                           | 547,420                                      | 14,950                                | 0.0273         | 0.9727        | 23.13                            |
| 72.5                           | 526,995                                      | 16,554                                | 0.0314         | 0.9686        | 22.50                            |
| 73.5                           | 503,274                                      | 15,610                                | 0.0310         | 0.9690        | 21.79                            |
| 74.5                           | 470,706                                      | 16,032                                | 0.0341         | 0.9659        | 21.11                            |
| 75.5                           | 437,500                                      | 14,748                                | 0.0337         | 0.9663        | 20.40                            |
| 76.5                           | 409,249                                      | 13,117                                | 0.0321         | 0.9679        | 19.71                            |
| 77.5                           | 380,536                                      | 15,058                                | 0.0396         | 0.9604        | 19.08                            |
| 78.5                           | 355,965                                      | 14,167                                | 0.0398         | 0.9602        | 18.32                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 380.3 AND 380.45 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1878-2016

EXPERIENCE BAND 1939-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 79.5                           | 335,938                                      | 12,230                                | 0.0364         | 0.9636        | 17.59                            |
| 80.5                           | 319,461                                      | 11,684                                | 0.0366         | 0.9634        | 16.95                            |
| 81.5                           | 305,509                                      | 12,542                                | 0.0411         | 0.9589        | 16.33                            |
| 82.5                           | 290,163                                      | 10,460                                | 0.0360         | 0.9640        | 15.66                            |
| 83.5                           | 276,532                                      | 10,396                                | 0.0376         | 0.9624        | 15.10                            |
| 84.5                           | 264,207                                      | 10,901                                | 0.0413         | 0.9587        | 14.53                            |
| 85.5                           | 250,167                                      | 9,481                                 | 0.0379         | 0.9621        | 13.93                            |
| 86.5                           | 235,042                                      | 9,529                                 | 0.0405         | 0.9595        | 13.40                            |
| 87.5                           | 216,188                                      | 8,592                                 | 0.0397         | 0.9603        | 12.86                            |
| 88.5                           | 199,221                                      | 7,012                                 | 0.0352         | 0.9648        | 12.35                            |
| 89.5                           | 183,885                                      | 6,867                                 | 0.0373         | 0.9627        | 11.91                            |
| 90.5                           | 168,282                                      | 6,649                                 | 0.0395         | 0.9605        | 11.47                            |
| 91.5                           | 153,161                                      | 4,838                                 | 0.0316         | 0.9684        | 11.01                            |
| 92.5                           | 143,722                                      | 4,457                                 | 0.0310         | 0.9690        | 10.67                            |
| 93.5                           | 134,407                                      | 3,736                                 | 0.0278         | 0.9722        | 10.34                            |
| 94.5                           | 127,993                                      | 3,711                                 | 0.0290         | 0.9710        | 10.05                            |
| 95.5                           | 123,088                                      | 3,695                                 | 0.0300         | 0.9700        | 9.76                             |
| 96.5                           | 117,776                                      | 3,714                                 | 0.0315         | 0.9685        | 9.46                             |
| 97.5                           | 112,644                                      | 3,619                                 | 0.0321         | 0.9679        | 9.17                             |
| 98.5                           | 108,039                                      | 3,145                                 | 0.0291         | 0.9709        | 8.87                             |
| 99.5                           | 103,677                                      | 2,973                                 | 0.0287         | 0.9713        | 8.61                             |
| 100.5                          | 98,962                                       | 3,434                                 | 0.0347         | 0.9653        | 8.37                             |
| 101.5                          | 92,891                                       | 3,197                                 | 0.0344         | 0.9656        | 8.08                             |
| 102.5                          | 88,018                                       | 4,580                                 | 0.0520         | 0.9480        | 7.80                             |
| 103.5                          | 81,380                                       | 4,575                                 | 0.0562         | 0.9438        | 7.39                             |
| 104.5                          | 75,167                                       | 4,128                                 | 0.0549         | 0.9451        | 6.98                             |
| 105.5                          | 69,403                                       | 1,854                                 | 0.0267         | 0.9733        | 6.59                             |
| 106.5                          | 65,041                                       | 1,607                                 | 0.0247         | 0.9753        | 6.42                             |
| 107.5                          | 61,189                                       | 1,391                                 | 0.0227         | 0.9773        | 6.26                             |
| 108.5                          | 56,755                                       | 900                                   | 0.0159         | 0.9841        | 6.12                             |
| 109.5                          | 53,525                                       | 929                                   | 0.0174         | 0.9826        | 6.02                             |
| 110.5                          | 50,829                                       | 589                                   | 0.0116         | 0.9884        | 5.92                             |
| 111.5                          | 48,465                                       | 760                                   | 0.0157         | 0.9843        | 5.85                             |
| 112.5                          | 45,339                                       | 1,182                                 | 0.0261         | 0.9739        | 5.75                             |
| 113.5                          | 42,488                                       | 1,034                                 | 0.0243         | 0.9757        | 5.60                             |
| 114.5                          | 38,238                                       | 1,079                                 | 0.0282         | 0.9718        | 5.47                             |
| 115.5                          | 35,999                                       | 228                                   | 0.0063         | 0.9937        | 5.31                             |
| 116.5                          | 29,986                                       | 587                                   | 0.0196         | 0.9804        | 5.28                             |
| 117.5                          | 27,658                                       | 1,262                                 | 0.0456         | 0.9544        | 5.18                             |
| 118.5                          | 24,580                                       | 756                                   | 0.0308         | 0.9692        | 4.94                             |



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 380.3 AND 380.45 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1878-2016

EXPERIENCE BAND 1939-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 119.5                          | 23,378                                       | 391                                   | 0.0167         | 0.9833        | 4.79                             |
| 120.5                          | 22,438                                       | 683                                   | 0.0304         | 0.9696        | 4.71                             |
| 121.5                          | 21,386                                       | 1,682                                 | 0.0787         | 0.9213        | 4.57                             |
| 122.5                          | 18,765                                       | 103                                   | 0.0055         | 0.9945        | 4.21                             |
| 123.5                          | 18,181                                       | 242                                   | 0.0133         | 0.9867        | 4.18                             |
| 124.5                          | 16,998                                       |                                       | 0.0000         | 1.0000        | 4.13                             |
| 125.5                          | 16,731                                       |                                       | 0.0000         | 1.0000        | 4.13                             |
| 126.5                          | 12,792                                       |                                       | 0.0000         | 1.0000        | 4.13                             |
| 127.5                          | 11,894                                       | 1,265                                 | 0.1063         | 0.8937        | 4.13                             |
| 128.5                          | 9,791                                        | 4,633                                 | 0.4732         | 0.5268        | 3.69                             |
| 129.5                          | 737                                          | 601                                   | 0.8164         | 0.1836        | 1.94                             |
| 130.5                          | 135                                          | 6                                     | 0.0434         | 0.9566        | 0.36                             |
| 131.5                          | 129                                          | 115                                   | 0.8918         | 0.1082        | 0.34                             |
| 132.5                          | 14                                           | 3                                     | 0.2486         | 0.7514        | 0.04                             |
| 133.5                          | 11                                           | 11                                    | 1.0000         |               | 0.03                             |
| 134.5                          |                                              |                                       |                |               |                                  |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 380.3 AND 380.45 SERVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1878-2016

EXPERIENCE BAND 1970-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 0.0                            | 497,387,290                                  | 2,145,593                             | 0.0043         | 0.9957        | 100.00                           |
| 0.5                            | 462,841,854                                  | 2,243,832                             | 0.0048         | 0.9952        | 99.57                            |
| 1.5                            | 419,033,040                                  | 1,925,840                             | 0.0046         | 0.9954        | 99.09                            |
| 2.5                            | 380,775,294                                  | 2,806,492                             | 0.0074         | 0.9926        | 98.63                            |
| 3.5                            | 343,415,031                                  | 2,731,806                             | 0.0080         | 0.9920        | 97.90                            |
| 4.5                            | 311,923,165                                  | 2,679,166                             | 0.0086         | 0.9914        | 97.12                            |
| 5.5                            | 286,769,089                                  | 2,668,900                             | 0.0093         | 0.9907        | 96.29                            |
| 6.5                            | 268,930,782                                  | 2,612,414                             | 0.0097         | 0.9903        | 95.39                            |
| 7.5                            | 253,197,635                                  | 2,368,396                             | 0.0094         | 0.9906        | 94.47                            |
| 8.5                            | 236,650,663                                  | 2,438,674                             | 0.0103         | 0.9897        | 93.58                            |
| 9.5                            | 222,223,175                                  | 2,297,768                             | 0.0103         | 0.9897        | 92.62                            |
| 10.5                           | 211,721,563                                  | 2,074,197                             | 0.0098         | 0.9902        | 91.66                            |
| 11.5                           | 201,011,822                                  | 2,035,176                             | 0.0101         | 0.9899        | 90.76                            |
| 12.5                           | 190,949,393                                  | 2,062,132                             | 0.0108         | 0.9892        | 89.85                            |
| 13.5                           | 183,539,522                                  | 1,945,418                             | 0.0106         | 0.9894        | 88.87                            |
| 14.5                           | 175,790,313                                  | 2,013,353                             | 0.0115         | 0.9885        | 87.93                            |
| 15.5                           | 166,905,103                                  | 2,059,855                             | 0.0123         | 0.9877        | 86.93                            |
| 16.5                           | 157,509,154                                  | 1,845,398                             | 0.0117         | 0.9883        | 85.85                            |
| 17.5                           | 148,436,733                                  | 2,048,104                             | 0.0138         | 0.9862        | 84.85                            |
| 18.5                           | 139,462,576                                  | 1,923,222                             | 0.0138         | 0.9862        | 83.68                            |
| 19.5                           | 131,057,365                                  | 1,740,921                             | 0.0133         | 0.9867        | 82.52                            |
| 20.5                           | 123,134,066                                  | 1,755,761                             | 0.0143         | 0.9857        | 81.43                            |
| 21.5                           | 114,819,525                                  | 1,580,522                             | 0.0138         | 0.9862        | 80.27                            |
| 22.5                           | 106,135,098                                  | 1,538,064                             | 0.0145         | 0.9855        | 79.16                            |
| 23.5                           | 98,555,848                                   | 1,914,977                             | 0.0194         | 0.9806        | 78.01                            |
| 24.5                           | 90,811,757                                   | 1,936,388                             | 0.0213         | 0.9787        | 76.50                            |
| 25.5                           | 83,798,956                                   | 1,866,574                             | 0.0223         | 0.9777        | 74.87                            |
| 26.5                           | 76,499,586                                   | 1,704,760                             | 0.0223         | 0.9777        | 73.20                            |
| 27.5                           | 69,607,053                                   | 1,660,007                             | 0.0238         | 0.9762        | 71.57                            |
| 28.5                           | 62,575,267                                   | 1,536,157                             | 0.0245         | 0.9755        | 69.86                            |
| 29.5                           | 56,582,272                                   | 1,326,746                             | 0.0234         | 0.9766        | 68.15                            |
| 30.5                           | 51,378,800                                   | 1,259,190                             | 0.0245         | 0.9755        | 66.55                            |
| 31.5                           | 46,699,654                                   | 1,266,200                             | 0.0271         | 0.9729        | 64.92                            |
| 32.5                           | 42,407,958                                   | 1,335,199                             | 0.0315         | 0.9685        | 63.16                            |
| 33.5                           | 38,472,438                                   | 1,149,159                             | 0.0299         | 0.9701        | 61.17                            |
| 34.5                           | 34,489,748                                   | 1,087,794                             | 0.0315         | 0.9685        | 59.34                            |
| 35.5                           | 30,093,799                                   | 1,023,646                             | 0.0340         | 0.9660        | 57.47                            |
| 36.5                           | 26,019,331                                   | 1,049,361                             | 0.0403         | 0.9597        | 55.51                            |
| 37.5                           | 22,804,661                                   | 800,693                               | 0.0351         | 0.9649        | 53.28                            |
| 38.5                           | 20,352,019                                   | 725,706                               | 0.0357         | 0.9643        | 51.41                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 380.3 AND 380.45 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1878-2016

EXPERIENCE BAND 1970-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 39.5                           | 17,419,448                                   | 470,782                               | 0.0270         | 0.9730        | 49.57                            |
| 40.5                           | 16,372,058                                   | 317,280                               | 0.0194         | 0.9806        | 48.23                            |
| 41.5                           | 15,879,013                                   | 284,696                               | 0.0179         | 0.9821        | 47.30                            |
| 42.5                           | 15,523,476                                   | 309,681                               | 0.0199         | 0.9801        | 46.45                            |
| 43.5                           | 14,730,941                                   | 271,689                               | 0.0184         | 0.9816        | 45.52                            |
| 44.5                           | 13,809,387                                   | 286,720                               | 0.0208         | 0.9792        | 44.68                            |
| 45.5                           | 12,883,674                                   | 228,209                               | 0.0177         | 0.9823        | 43.76                            |
| 46.5                           | 11,950,374                                   | 202,582                               | 0.0170         | 0.9830        | 42.98                            |
| 47.5                           | 10,997,423                                   | 189,860                               | 0.0173         | 0.9827        | 42.25                            |
| 48.5                           | 9,794,046                                    | 200,761                               | 0.0205         | 0.9795        | 41.52                            |
| 49.5                           | 8,655,585                                    | 158,486                               | 0.0183         | 0.9817        | 40.67                            |
| 50.5                           | 7,584,240                                    | 184,451                               | 0.0243         | 0.9757        | 39.93                            |
| 51.5                           | 6,717,527                                    | 173,490                               | 0.0258         | 0.9742        | 38.96                            |
| 52.5                           | 5,854,893                                    | 138,610                               | 0.0237         | 0.9763        | 37.95                            |
| 53.5                           | 5,022,900                                    | 125,549                               | 0.0250         | 0.9750        | 37.05                            |
| 54.5                           | 4,313,823                                    | 119,926                               | 0.0278         | 0.9722        | 36.13                            |
| 55.5                           | 3,606,950                                    | 107,491                               | 0.0298         | 0.9702        | 35.12                            |
| 56.5                           | 3,011,692                                    | 82,368                                | 0.0273         | 0.9727        | 34.07                            |
| 57.5                           | 2,468,516                                    | 53,729                                | 0.0218         | 0.9782        | 33.14                            |
| 58.5                           | 2,055,007                                    | 50,537                                | 0.0246         | 0.9754        | 32.42                            |
| 59.5                           | 1,739,017                                    | 46,329                                | 0.0266         | 0.9734        | 31.62                            |
| 60.5                           | 1,411,053                                    | 39,335                                | 0.0279         | 0.9721        | 30.78                            |
| 61.5                           | 1,155,025                                    | 28,439                                | 0.0246         | 0.9754        | 29.92                            |
| 62.5                           | 983,248                                      | 26,047                                | 0.0265         | 0.9735        | 29.19                            |
| 63.5                           | 866,655                                      | 24,055                                | 0.0278         | 0.9722        | 28.41                            |
| 64.5                           | 747,219                                      | 19,981                                | 0.0267         | 0.9733        | 27.62                            |
| 65.5                           | 641,684                                      | 20,149                                | 0.0314         | 0.9686        | 26.89                            |
| 66.5                           | 553,212                                      | 15,113                                | 0.0273         | 0.9727        | 26.04                            |
| 67.5                           | 498,646                                      | 14,150                                | 0.0284         | 0.9716        | 25.33                            |
| 68.5                           | 466,337                                      | 11,396                                | 0.0244         | 0.9756        | 24.61                            |
| 69.5                           | 445,483                                      | 12,691                                | 0.0285         | 0.9715        | 24.01                            |
| 70.5                           | 425,549                                      | 11,395                                | 0.0268         | 0.9732        | 23.33                            |
| 71.5                           | 416,603                                      | 11,510                                | 0.0276         | 0.9724        | 22.70                            |
| 72.5                           | 404,530                                      | 13,296                                | 0.0329         | 0.9671        | 22.07                            |
| 73.5                           | 387,379                                      | 12,943                                | 0.0334         | 0.9666        | 21.35                            |
| 74.5                           | 359,765                                      | 13,126                                | 0.0365         | 0.9635        | 20.64                            |
| 75.5                           | 335,238                                      | 12,106                                | 0.0361         | 0.9639        | 19.88                            |
| 76.5                           | 311,621                                      | 10,392                                | 0.0333         | 0.9667        | 19.16                            |
| 77.5                           | 290,552                                      | 11,594                                | 0.0399         | 0.9601        | 18.53                            |
| 78.5                           | 271,338                                      | 11,911                                | 0.0439         | 0.9561        | 17.79                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 380.3 AND 380.45 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1878-2016

EXPERIENCE BAND 1970-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 79.5                           | 270,605                                      | 10,939                                | 0.0404         | 0.9596        | 17.01                            |
| 80.5                           | 259,616                                      | 10,456                                | 0.0403         | 0.9597        | 16.32                            |
| 81.5                           | 251,507                                      | 11,234                                | 0.0447         | 0.9553        | 15.66                            |
| 82.5                           | 258,227                                      | 9,247                                 | 0.0358         | 0.9642        | 14.96                            |
| 83.5                           | 252,691                                      | 9,485                                 | 0.0375         | 0.9625        | 14.43                            |
| 84.5                           | 254,412                                      | 10,290                                | 0.0404         | 0.9596        | 13.88                            |
| 85.5                           | 242,747                                      | 9,248                                 | 0.0381         | 0.9619        | 13.32                            |
| 86.5                           | 234,298                                      | 9,525                                 | 0.0407         | 0.9593        | 12.81                            |
| 87.5                           | 215,447                                      | 8,592                                 | 0.0399         | 0.9601        | 12.29                            |
| 88.5                           | 198,492                                      | 7,007                                 | 0.0353         | 0.9647        | 11.80                            |
| 89.5                           | 183,826                                      | 6,867                                 | 0.0374         | 0.9626        | 11.39                            |
| 90.5                           | 168,230                                      | 6,645                                 | 0.0395         | 0.9605        | 10.96                            |
| 91.5                           | 153,161                                      | 4,838                                 | 0.0316         | 0.9684        | 10.53                            |
| 92.5                           | 143,722                                      | 4,457                                 | 0.0310         | 0.9690        | 10.20                            |
| 93.5                           | 134,407                                      | 3,736                                 | 0.0278         | 0.9722        | 9.88                             |
| 94.5                           | 127,993                                      | 3,711                                 | 0.0290         | 0.9710        | 9.61                             |
| 95.5                           | 123,088                                      | 3,695                                 | 0.0300         | 0.9700        | 9.33                             |
| 96.5                           | 117,776                                      | 3,714                                 | 0.0315         | 0.9685        | 9.05                             |
| 97.5                           | 112,644                                      | 3,619                                 | 0.0321         | 0.9679        | 8.76                             |
| 98.5                           | 108,039                                      | 3,145                                 | 0.0291         | 0.9709        | 8.48                             |
| 99.5                           | 103,677                                      | 2,973                                 | 0.0287         | 0.9713        | 8.23                             |
| 100.5                          | 98,962                                       | 3,434                                 | 0.0347         | 0.9653        | 8.00                             |
| 101.5                          | 92,891                                       | 3,197                                 | 0.0344         | 0.9656        | 7.72                             |
| 102.5                          | 88,018                                       | 4,580                                 | 0.0520         | 0.9480        | 7.45                             |
| 103.5                          | 81,380                                       | 4,575                                 | 0.0562         | 0.9438        | 7.07                             |
| 104.5                          | 75,167                                       | 4,128                                 | 0.0549         | 0.9451        | 6.67                             |
| 105.5                          | 69,403                                       | 1,854                                 | 0.0267         | 0.9733        | 6.30                             |
| 106.5                          | 65,041                                       | 1,607                                 | 0.0247         | 0.9753        | 6.13                             |
| 107.5                          | 61,189                                       | 1,391                                 | 0.0227         | 0.9773        | 5.98                             |
| 108.5                          | 56,755                                       | 900                                   | 0.0159         | 0.9841        | 5.85                             |
| 109.5                          | 53,525                                       | 929                                   | 0.0174         | 0.9826        | 5.75                             |
| 110.5                          | 50,829                                       | 589                                   | 0.0116         | 0.9884        | 5.65                             |
| 111.5                          | 48,465                                       | 760                                   | 0.0157         | 0.9843        | 5.59                             |
| 112.5                          | 45,339                                       | 1,182                                 | 0.0261         | 0.9739        | 5.50                             |
| 113.5                          | 42,488                                       | 1,034                                 | 0.0243         | 0.9757        | 5.36                             |
| 114.5                          | 38,238                                       | 1,079                                 | 0.0282         | 0.9718        | 5.23                             |
| 115.5                          | 35,999                                       | 228                                   | 0.0063         | 0.9937        | 5.08                             |
| 116.5                          | 29,986                                       | 587                                   | 0.0196         | 0.9804        | 5.05                             |
| 117.5                          | 27,658                                       | 1,262                                 | 0.0456         | 0.9544        | 4.95                             |
| 118.5                          | 24,580                                       | 756                                   | 0.0308         | 0.9692        | 4.72                             |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 380.3 AND 380.45 SERVICES

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1878-2016       |                                              |                                       | EXPERIENCE BAND 1970-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 119.5                          | 23,378                                       | 391                                   | 0.0167                    | 0.9833        | 4.58                             |
| 120.5                          | 22,438                                       | 683                                   | 0.0304                    | 0.9696        | 4.50                             |
| 121.5                          | 21,386                                       | 1,682                                 | 0.0787                    | 0.9213        | 4.36                             |
| 122.5                          | 18,765                                       | 103                                   | 0.0055                    | 0.9945        | 4.02                             |
| 123.5                          | 18,181                                       | 242                                   | 0.0133                    | 0.9867        | 4.00                             |
| 124.5                          | 16,998                                       |                                       | 0.0000                    | 1.0000        | 3.95                             |
| 125.5                          | 16,731                                       |                                       | 0.0000                    | 1.0000        | 3.95                             |
| 126.5                          | 12,792                                       |                                       | 0.0000                    | 1.0000        | 3.95                             |
| 127.5                          | 11,894                                       | 1,265                                 | 0.1063                    | 0.8937        | 3.95                             |
| 128.5                          | 9,791                                        | 4,633                                 | 0.4732                    | 0.5268        | 3.53                             |
| 129.5                          | 737                                          | 601                                   | 0.8164                    | 0.1836        | 1.86                             |
| 130.5                          | 135                                          | 6                                     | 0.0434                    | 0.9566        | 0.34                             |
| 131.5                          | 129                                          | 115                                   | 0.8918                    | 0.1082        | 0.33                             |
| 132.5                          | 14                                           | 3                                     | 0.2486                    | 0.7514        | 0.04                             |
| 133.5                          | 11                                           | 11                                    | 1.0000                    |               | 0.03                             |
| 134.5                          |                                              |                                       |                           |               |                                  |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 380.3 AND 380.45 SERVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1878-2016

EXPERIENCE BAND 1997-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 0.0                            | 365,327,332                                  | 1,835,620                             | 0.0050         | 0.9950        | 100.00                           |
| 0.5                            | 337,525,685                                  | 943,486                               | 0.0028         | 0.9972        | 99.50                            |
| 1.5                            | 301,716,876                                  | 1,240,535                             | 0.0041         | 0.9959        | 99.22                            |
| 2.5                            | 271,247,558                                  | 2,073,455                             | 0.0076         | 0.9924        | 98.81                            |
| 3.5                            | 240,504,000                                  | 2,066,125                             | 0.0086         | 0.9914        | 98.06                            |
| 4.5                            | 215,364,331                                  | 2,025,726                             | 0.0094         | 0.9906        | 97.21                            |
| 5.5                            | 195,741,379                                  | 2,000,875                             | 0.0102         | 0.9898        | 96.30                            |
| 6.5                            | 184,062,388                                  | 1,986,776                             | 0.0108         | 0.9892        | 95.31                            |
| 7.5                            | 174,371,761                                  | 1,780,314                             | 0.0102         | 0.9898        | 94.29                            |
| 8.5                            | 164,028,215                                  | 1,814,623                             | 0.0111         | 0.9889        | 93.32                            |
| 9.5                            | 154,793,909                                  | 1,697,899                             | 0.0110         | 0.9890        | 92.29                            |
| 10.5                           | 148,698,901                                  | 1,515,354                             | 0.0102         | 0.9898        | 91.28                            |
| 11.5                           | 142,248,505                                  | 1,404,250                             | 0.0099         | 0.9901        | 90.35                            |
| 12.5                           | 136,344,614                                  | 1,453,063                             | 0.0107         | 0.9893        | 89.46                            |
| 13.5                           | 132,444,104                                  | 1,405,437                             | 0.0106         | 0.9894        | 88.50                            |
| 14.5                           | 128,514,249                                  | 1,453,385                             | 0.0113         | 0.9887        | 87.56                            |
| 15.5                           | 124,408,636                                  | 1,525,167                             | 0.0123         | 0.9877        | 86.57                            |
| 16.5                           | 120,057,385                                  | 1,385,075                             | 0.0115         | 0.9885        | 85.51                            |
| 17.5                           | 114,464,760                                  | 1,600,149                             | 0.0140         | 0.9860        | 84.53                            |
| 18.5                           | 108,098,744                                  | 1,480,749                             | 0.0137         | 0.9863        | 83.34                            |
| 19.5                           | 103,414,436                                  | 1,301,374                             | 0.0126         | 0.9874        | 82.20                            |
| 20.5                           | 97,398,411                                   | 1,255,526                             | 0.0129         | 0.9871        | 81.17                            |
| 21.5                           | 90,625,857                                   | 1,198,678                             | 0.0132         | 0.9868        | 80.12                            |
| 22.5                           | 83,152,248                                   | 1,136,814                             | 0.0137         | 0.9863        | 79.06                            |
| 23.5                           | 76,908,253                                   | 1,275,966                             | 0.0166         | 0.9834        | 77.98                            |
| 24.5                           | 71,062,940                                   | 1,211,178                             | 0.0170         | 0.9830        | 76.69                            |
| 25.5                           | 66,021,512                                   | 1,275,810                             | 0.0193         | 0.9807        | 75.38                            |
| 26.5                           | 60,455,355                                   | 1,238,111                             | 0.0205         | 0.9795        | 73.92                            |
| 27.5                           | 55,157,662                                   | 1,321,769                             | 0.0240         | 0.9760        | 72.41                            |
| 28.5                           | 49,717,109                                   | 1,195,040                             | 0.0240         | 0.9760        | 70.67                            |
| 29.5                           | 45,192,498                                   | 1,015,772                             | 0.0225         | 0.9775        | 68.98                            |
| 30.5                           | 41,406,836                                   | 1,000,262                             | 0.0242         | 0.9758        | 67.43                            |
| 31.5                           | 37,861,834                                   | 1,031,024                             | 0.0272         | 0.9728        | 65.80                            |
| 32.5                           | 34,734,317                                   | 1,069,713                             | 0.0308         | 0.9692        | 64.01                            |
| 33.5                           | 31,941,716                                   | 982,601                               | 0.0308         | 0.9692        | 62.03                            |
| 34.5                           | 28,873,846                                   | 954,407                               | 0.0331         | 0.9669        | 60.13                            |
| 35.5                           | 25,331,677                                   | 914,752                               | 0.0361         | 0.9639        | 58.14                            |
| 36.5                           | 22,029,932                                   | 952,698                               | 0.0432         | 0.9568        | 56.04                            |
| 37.5                           | 19,633,530                                   | 723,476                               | 0.0368         | 0.9632        | 53.62                            |
| 38.5                           | 17,680,390                                   | 619,121                               | 0.0350         | 0.9650        | 51.64                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 380.3 AND 380.45 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1878-2016

EXPERIENCE BAND 1997-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 39.5                           | 15,165,548                                   | 372,908                               | 0.0246         | 0.9754        | 49.83                            |
| 40.5                           | 14,558,955                                   | 250,072                               | 0.0172         | 0.9828        | 48.61                            |
| 41.5                           | 14,408,069                                   | 229,766                               | 0.0159         | 0.9841        | 47.77                            |
| 42.5                           | 14,277,378                                   | 249,445                               | 0.0175         | 0.9825        | 47.01                            |
| 43.5                           | 13,658,958                                   | 240,005                               | 0.0176         | 0.9824        | 46.19                            |
| 44.5                           | 12,891,558                                   | 263,610                               | 0.0204         | 0.9796        | 45.38                            |
| 45.5                           | 12,105,605                                   | 209,569                               | 0.0173         | 0.9827        | 44.45                            |
| 46.5                           | 11,287,895                                   | 185,136                               | 0.0164         | 0.9836        | 43.68                            |
| 47.5                           | 10,424,618                                   | 172,744                               | 0.0166         | 0.9834        | 42.96                            |
| 48.5                           | 9,287,024                                    | 185,328                               | 0.0200         | 0.9800        | 42.25                            |
| 49.5                           | 8,198,004                                    | 143,131                               | 0.0175         | 0.9825        | 41.41                            |
| 50.5                           | 7,155,932                                    | 171,210                               | 0.0239         | 0.9761        | 40.68                            |
| 51.5                           | 6,305,704                                    | 161,486                               | 0.0256         | 0.9744        | 39.71                            |
| 52.5                           | 5,457,067                                    | 125,325                               | 0.0230         | 0.9770        | 38.69                            |
| 53.5                           | 4,639,735                                    | 113,480                               | 0.0245         | 0.9755        | 37.81                            |
| 54.5                           | 3,953,991                                    | 109,082                               | 0.0276         | 0.9724        | 36.88                            |
| 55.5                           | 3,272,880                                    | 96,403                                | 0.0295         | 0.9705        | 35.86                            |
| 56.5                           | 2,702,320                                    | 72,460                                | 0.0268         | 0.9732        | 34.81                            |
| 57.5                           | 2,184,252                                    | 43,264                                | 0.0198         | 0.9802        | 33.87                            |
| 58.5                           | 1,788,398                                    | 38,178                                | 0.0213         | 0.9787        | 33.20                            |
| 59.5                           | 1,484,513                                    | 35,807                                | 0.0241         | 0.9759        | 32.49                            |
| 60.5                           | 1,164,102                                    | 30,162                                | 0.0259         | 0.9741        | 31.71                            |
| 61.5                           | 907,889                                      | 19,980                                | 0.0220         | 0.9780        | 30.89                            |
| 62.5                           | 738,168                                      | 17,405                                | 0.0236         | 0.9764        | 30.21                            |
| 63.5                           | 627,963                                      | 15,422                                | 0.0246         | 0.9754        | 29.50                            |
| 64.5                           | 510,963                                      | 11,464                                | 0.0224         | 0.9776        | 28.77                            |
| 65.5                           | 406,648                                      | 11,686                                | 0.0287         | 0.9713        | 28.13                            |
| 66.5                           | 327,389                                      | 7,654                                 | 0.0234         | 0.9766        | 27.32                            |
| 67.5                           | 274,480                                      | 6,295                                 | 0.0229         | 0.9771        | 26.68                            |
| 68.5                           | 241,879                                      | 4,219                                 | 0.0174         | 0.9826        | 26.07                            |
| 69.5                           | 219,514                                      | 4,213                                 | 0.0192         | 0.9808        | 25.61                            |
| 70.5                           | 212,838                                      | 3,108                                 | 0.0146         | 0.9854        | 25.12                            |
| 71.5                           | 216,162                                      | 3,531                                 | 0.0163         | 0.9837        | 24.75                            |
| 72.5                           | 214,538                                      | 4,557                                 | 0.0212         | 0.9788        | 24.35                            |
| 73.5                           | 210,488                                      | 4,605                                 | 0.0219         | 0.9781        | 23.83                            |
| 74.5                           | 193,048                                      | 5,356                                 | 0.0277         | 0.9723        | 23.31                            |
| 75.5                           | 172,861                                      | 4,237                                 | 0.0245         | 0.9755        | 22.67                            |
| 76.5                           | 157,958                                      | 3,856                                 | 0.0244         | 0.9756        | 22.11                            |
| 77.5                           | 141,191                                      | 4,149                                 | 0.0294         | 0.9706        | 21.57                            |
| 78.5                           | 128,941                                      | 5,079                                 | 0.0394         | 0.9606        | 20.94                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 380.3 AND 380.45 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1878-2016

EXPERIENCE BAND 1997-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 79.5                           | 119,634                                      | 3,287                                 | 0.0275         | 0.9725        | 20.11                            |
| 80.5                           | 114,752                                      | 3,652                                 | 0.0318         | 0.9682        | 19.56                            |
| 81.5                           | 112,766                                      | 3,736                                 | 0.0331         | 0.9669        | 18.94                            |
| 82.5                           | 109,441                                      | 3,298                                 | 0.0301         | 0.9699        | 18.31                            |
| 83.5                           | 106,120                                      | 3,080                                 | 0.0290         | 0.9710        | 17.76                            |
| 84.5                           | 103,674                                      | 3,351                                 | 0.0323         | 0.9677        | 17.24                            |
| 85.5                           | 100,022                                      | 2,707                                 | 0.0271         | 0.9729        | 16.68                            |
| 86.5                           | 95,243                                       | 2,462                                 | 0.0259         | 0.9741        | 16.23                            |
| 87.5                           | 86,756                                       | 2,411                                 | 0.0278         | 0.9722        | 15.81                            |
| 88.5                           | 80,736                                       | 2,099                                 | 0.0260         | 0.9740        | 15.37                            |
| 89.5                           | 74,241                                       | 1,955                                 | 0.0263         | 0.9737        | 14.97                            |
| 90.5                           | 66,060                                       | 1,319                                 | 0.0200         | 0.9800        | 14.58                            |
| 91.5                           | 59,130                                       | 1,302                                 | 0.0220         | 0.9780        | 14.29                            |
| 92.5                           | 56,980                                       | 1,081                                 | 0.0190         | 0.9810        | 13.97                            |
| 93.5                           | 53,616                                       | 926                                   | 0.0173         | 0.9827        | 13.71                            |
| 94.5                           | 54,873                                       | 686                                   | 0.0125         | 0.9875        | 13.47                            |
| 95.5                           | 58,463                                       | 1,030                                 | 0.0176         | 0.9824        | 13.30                            |
| 96.5                           | 61,905                                       | 1,583                                 | 0.0256         | 0.9744        | 13.07                            |
| 97.5                           | 61,103                                       | 1,465                                 | 0.0240         | 0.9760        | 12.74                            |
| 98.5                           | 60,902                                       | 1,289                                 | 0.0212         | 0.9788        | 12.43                            |
| 99.5                           | 59,681                                       | 1,022                                 | 0.0171         | 0.9829        | 12.17                            |
| 100.5                          | 57,910                                       | 1,208                                 | 0.0209         | 0.9791        | 11.96                            |
| 101.5                          | 55,034                                       | 1,657                                 | 0.0301         | 0.9699        | 11.71                            |
| 102.5                          | 53,130                                       | 2,633                                 | 0.0496         | 0.9504        | 11.36                            |
| 103.5                          | 48,931                                       | 2,613                                 | 0.0534         | 0.9466        | 10.79                            |
| 104.5                          | 46,165                                       | 2,247                                 | 0.0487         | 0.9513        | 10.22                            |
| 105.5                          | 42,850                                       | 842                                   | 0.0196         | 0.9804        | 9.72                             |
| 106.5                          | 44,927                                       | 527                                   | 0.0117         | 0.9883        | 9.53                             |
| 107.5                          | 43,194                                       | 503                                   | 0.0116         | 0.9884        | 9.42                             |
| 108.5                          | 40,890                                       | 368                                   | 0.0090         | 0.9910        | 9.31                             |
| 109.5                          | 45,011                                       | 259                                   | 0.0058         | 0.9942        | 9.22                             |
| 110.5                          | 44,155                                       | 485                                   | 0.0110         | 0.9890        | 9.17                             |
| 111.5                          | 46,230                                       | 711                                   | 0.0154         | 0.9846        | 9.07                             |
| 112.5                          | 43,378                                       | 1,125                                 | 0.0259         | 0.9741        | 8.93                             |
| 113.5                          | 42,311                                       | 1,028                                 | 0.0243         | 0.9757        | 8.70                             |
| 114.5                          | 38,068                                       | 1,069                                 | 0.0281         | 0.9719        | 8.49                             |
| 115.5                          | 35,844                                       | 224                                   | 0.0063         | 0.9937        | 8.25                             |
| 116.5                          | 29,972                                       | 587                                   | 0.0196         | 0.9804        | 8.20                             |
| 117.5                          | 27,647                                       | 1,262                                 | 0.0457         | 0.9543        | 8.04                             |
| 118.5                          | 24,580                                       | 756                                   | 0.0308         | 0.9692        | 7.67                             |



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 380.3 AND 380.45 SERVICES

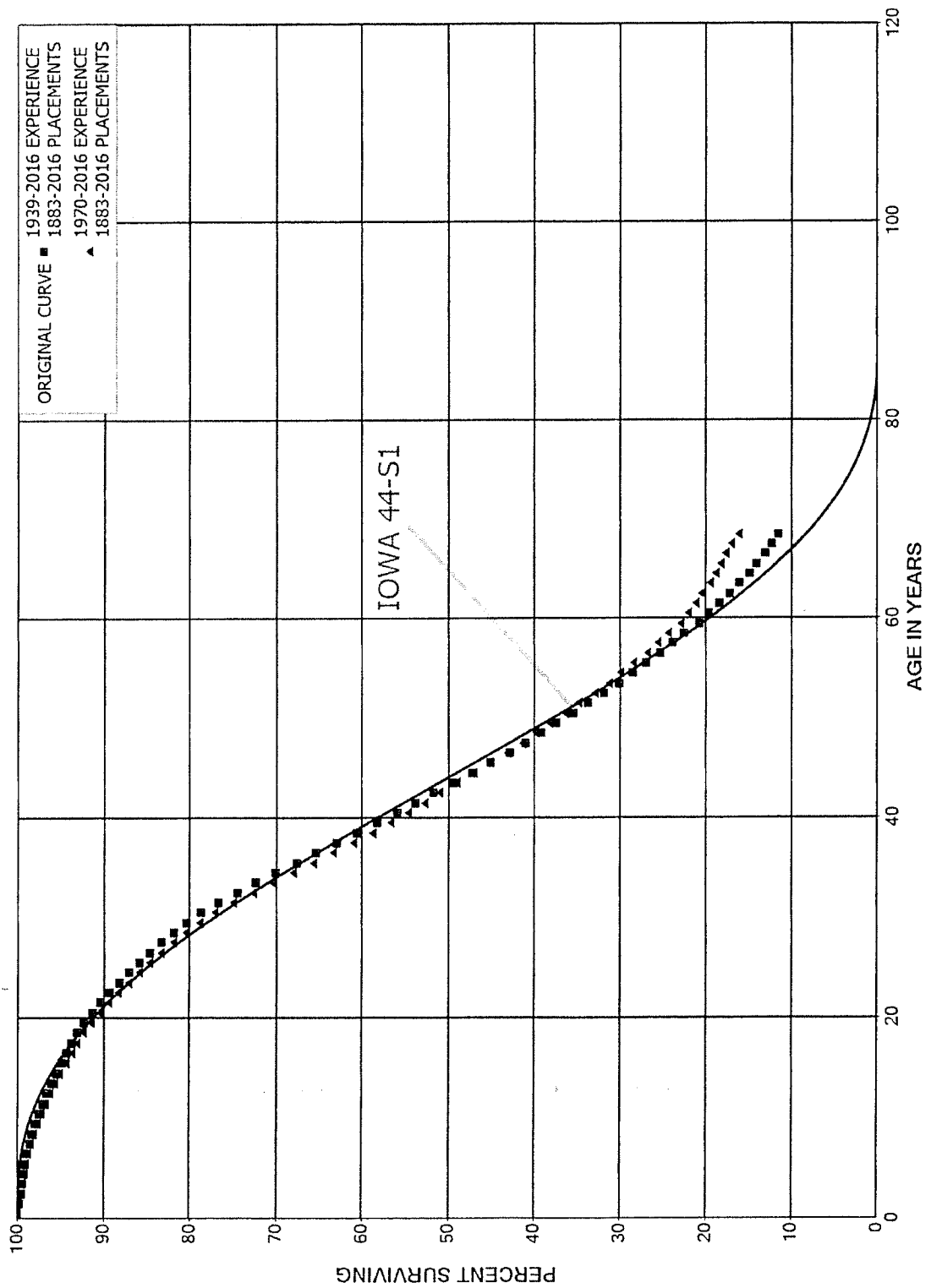
ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1878-2016

EXPERIENCE BAND 1997-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 119.5                          | 23,378                                       | 391                                   | 0.0167         | 0.9833        | 7.43                             |
| 120.5                          | 22,438                                       | 683                                   | 0.0304         | 0.9696        | 7.31                             |
| 121.5                          | 21,386                                       | 1,682                                 | 0.0787         | 0.9213        | 7.09                             |
| 122.5                          | 18,765                                       | 103                                   | 0.0055         | 0.9945        | 6.53                             |
| 123.5                          | 18,181                                       | 242                                   | 0.0133         | 0.9867        | 6.49                             |
| 124.5                          | 16,998                                       |                                       | 0.0000         | 1.0000        | 6.41                             |
| 125.5                          | 16,731                                       |                                       | 0.0000         | 1.0000        | 6.41                             |
| 126.5                          | 12,792                                       |                                       | 0.0000         | 1.0000        | 6.41                             |
| 127.5                          | 11,894                                       | 1,265                                 | 0.1063         | 0.8937        | 6.41                             |
| 128.5                          | 9,791                                        | 4,633                                 | 0.4732         | 0.5268        | 5.73                             |
| 129.5                          | 737                                          | 601                                   | 0.8164         | 0.1836        | 3.02                             |
| 130.5                          | 135                                          | 6                                     | 0.0434         | 0.9566        | 0.55                             |
| 131.5                          | 129                                          | 115                                   | 0.8918         | 0.1082        | 0.53                             |
| 132.5                          | 14                                           | 3                                     | 0.2486         | 0.7514        | 0.06                             |
| 133.5                          | 11                                           | 11                                    | 1.0000         |               | 0.04                             |
| 134.5                          |                                              |                                       |                |               |                                  |

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 1883-2016

EXPERIENCE BAND 1939-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 0.0                            | 49,592,534                                   | 21,184                                | 0.0004         | 0.9996        | 100.00                           |
| 0.5                            | 48,330,538                                   | 103,796                               | 0.0021         | 0.9979        | 99.96                            |
| 1.5                            | 45,326,353                                   | 115,442                               | 0.0025         | 0.9975        | 99.74                            |
| 2.5                            | 43,964,722                                   | 34,321                                | 0.0008         | 0.9992        | 99.49                            |
| 3.5                            | 42,617,642                                   | 77,583                                | 0.0018         | 0.9982        | 99.41                            |
| 4.5                            | 40,967,805                                   | 75,459                                | 0.0018         | 0.9982        | 99.23                            |
| 5.5                            | 39,524,383                                   | 72,498                                | 0.0018         | 0.9982        | 99.05                            |
| 6.5                            | 38,350,375                                   | 122,926                               | 0.0032         | 0.9968        | 98.87                            |
| 7.5                            | 36,795,713                                   | 108,402                               | 0.0029         | 0.9971        | 98.55                            |
| 8.5                            | 35,596,734                                   | 130,369                               | 0.0037         | 0.9963        | 98.26                            |
| 9.5                            | 34,514,102                                   | 132,644                               | 0.0038         | 0.9962        | 97.90                            |
| 10.5                           | 33,991,075                                   | 153,141                               | 0.0045         | 0.9955        | 97.52                            |
| 11.5                           | 33,469,999                                   | 174,921                               | 0.0052         | 0.9948        | 97.08                            |
| 12.5                           | 32,290,037                                   | 175,849                               | 0.0054         | 0.9946        | 96.58                            |
| 13.5                           | 31,358,029                                   | 166,743                               | 0.0053         | 0.9947        | 96.05                            |
| 14.5                           | 30,113,471                                   | 206,976                               | 0.0069         | 0.9931        | 95.54                            |
| 15.5                           | 29,500,849                                   | 180,696                               | 0.0061         | 0.9939        | 94.88                            |
| 16.5                           | 29,350,941                                   | 175,956                               | 0.0060         | 0.9940        | 94.30                            |
| 17.5                           | 28,055,536                                   | 194,581                               | 0.0069         | 0.9931        | 93.74                            |
| 18.5                           | 26,908,780                                   | 243,382                               | 0.0090         | 0.9910        | 93.09                            |
| 19.5                           | 25,975,434                                   | 268,929                               | 0.0104         | 0.9896        | 92.24                            |
| 20.5                           | 24,035,925                                   | 248,510                               | 0.0103         | 0.9897        | 91.29                            |
| 21.5                           | 23,807,163                                   | 268,055                               | 0.0113         | 0.9887        | 90.34                            |
| 22.5                           | 23,166,792                                   | 298,075                               | 0.0129         | 0.9871        | 89.33                            |
| 23.5                           | 21,947,635                                   | 287,444                               | 0.0131         | 0.9869        | 88.18                            |
| 24.5                           | 20,856,789                                   | 281,264                               | 0.0135         | 0.9865        | 87.02                            |
| 25.5                           | 20,036,736                                   | 291,766                               | 0.0146         | 0.9854        | 85.85                            |
| 26.5                           | 19,261,631                                   | 307,429                               | 0.0160         | 0.9840        | 84.60                            |
| 27.5                           | 18,173,628                                   | 314,784                               | 0.0173         | 0.9827        | 83.25                            |
| 28.5                           | 17,195,293                                   | 306,151                               | 0.0178         | 0.9822        | 81.81                            |
| 29.5                           | 16,285,821                                   | 340,047                               | 0.0209         | 0.9791        | 80.35                            |
| 30.5                           | 15,337,873                                   | 389,905                               | 0.0254         | 0.9746        | 78.67                            |
| 31.5                           | 14,402,382                                   | 411,072                               | 0.0285         | 0.9715        | 76.67                            |
| 32.5                           | 13,561,454                                   | 387,727                               | 0.0286         | 0.9714        | 74.48                            |
| 33.5                           | 12,851,704                                   | 413,549                               | 0.0322         | 0.9678        | 72.36                            |
| 34.5                           | 12,004,790                                   | 407,233                               | 0.0339         | 0.9661        | 70.03                            |
| 35.5                           | 10,960,812                                   | 373,156                               | 0.0340         | 0.9660        | 67.65                            |
| 36.5                           | 10,002,393                                   | 368,748                               | 0.0369         | 0.9631        | 65.35                            |
| 37.5                           | 9,335,898                                    | 346,473                               | 0.0371         | 0.9629        | 62.94                            |
| 38.5                           | 8,809,835                                    | 335,401                               | 0.0381         | 0.9619        | 60.60                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1883-2016

EXPERIENCE BAND 1939-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 39.5                           | 8,294,525                                    | 325,551                               | 0.0392         | 0.9608        | 58.30                            |
| 40.5                           | 7,871,464                                    | 312,458                               | 0.0397         | 0.9603        | 56.01                            |
| 41.5                           | 7,350,575                                    | 281,709                               | 0.0383         | 0.9617        | 53.78                            |
| 42.5                           | 6,886,321                                    | 307,283                               | 0.0446         | 0.9554        | 51.72                            |
| 43.5                           | 6,443,685                                    | 288,859                               | 0.0448         | 0.9552        | 49.42                            |
| 44.5                           | 5,928,489                                    | 270,798                               | 0.0457         | 0.9543        | 47.20                            |
| 45.5                           | 5,373,439                                    | 260,785                               | 0.0485         | 0.9515        | 45.04                            |
| 46.5                           | 4,954,672                                    | 227,470                               | 0.0459         | 0.9541        | 42.86                            |
| 47.5                           | 4,520,833                                    | 195,514                               | 0.0432         | 0.9568        | 40.89                            |
| 48.5                           | 4,138,005                                    | 178,054                               | 0.0430         | 0.9570        | 39.12                            |
| 49.5                           | 3,678,677                                    | 197,411                               | 0.0537         | 0.9463        | 37.44                            |
| 50.5                           | 3,204,560                                    | 152,190                               | 0.0475         | 0.9525        | 35.43                            |
| 51.5                           | 2,803,818                                    | 160,641                               | 0.0573         | 0.9427        | 33.75                            |
| 52.5                           | 2,431,788                                    | 136,181                               | 0.0560         | 0.9440        | 31.81                            |
| 53.5                           | 2,153,817                                    | 108,750                               | 0.0505         | 0.9495        | 30.03                            |
| 54.5                           | 1,818,132                                    | 97,058                                | 0.0534         | 0.9466        | 28.52                            |
| 55.5                           | 1,480,660                                    | 96,042                                | 0.0649         | 0.9351        | 26.99                            |
| 56.5                           | 1,205,254                                    | 68,065                                | 0.0565         | 0.9435        | 25.24                            |
| 57.5                           | 965,108                                      | 54,347                                | 0.0563         | 0.9437        | 23.82                            |
| 58.5                           | 740,694                                      | 56,388                                | 0.0761         | 0.9239        | 22.48                            |
| 59.5                           | 542,778                                      | 31,067                                | 0.0572         | 0.9428        | 20.76                            |
| 60.5                           | 480,831                                      | 30,361                                | 0.0631         | 0.9369        | 19.58                            |
| 61.5                           | 383,575                                      | 23,416                                | 0.0610         | 0.9390        | 18.34                            |
| 62.5                           | 307,075                                      | 21,036                                | 0.0685         | 0.9315        | 17.22                            |
| 63.5                           | 267,000                                      | 19,348                                | 0.0725         | 0.9275        | 16.04                            |
| 64.5                           | 212,994                                      | 11,093                                | 0.0521         | 0.9479        | 14.88                            |
| 65.5                           | 147,885                                      | 10,481                                | 0.0709         | 0.9291        | 14.10                            |
| 66.5                           | 108,763                                      | 6,695                                 | 0.0616         | 0.9384        | 13.10                            |
| 67.5                           | 85,592                                       | 5,521                                 | 0.0645         | 0.9355        | 12.30                            |
| 68.5                           | 64,811                                       | 3,742                                 | 0.0577         | 0.9423        | 11.50                            |
| 69.5                           | 58,903                                       | 4,912                                 | 0.0834         | 0.9166        | 10.84                            |
| 70.5                           | 49,835                                       | 2,571                                 | 0.0516         | 0.9484        | 9.94                             |
| 71.5                           | 46,586                                       | 642                                   | 0.0138         | 0.9862        | 9.42                             |
| 72.5                           | 45,830                                       | 455                                   | 0.0099         | 0.9901        | 9.29                             |
| 73.5                           | 43,545                                       | 764                                   | 0.0175         | 0.9825        | 9.20                             |
| 74.5                           | 39,995                                       | 918                                   | 0.0229         | 0.9771        | 9.04                             |
| 75.5                           | 37,054                                       |                                       | 0.0000         | 1.0000        | 8.83                             |
| 76.5                           | 37,054                                       | 194                                   | 0.0052         | 0.9948        | 8.83                             |
| 77.5                           | 36,455                                       | 870                                   | 0.0239         | 0.9761        | 8.79                             |
| 78.5                           | 35,363                                       | 203                                   | 0.0057         | 0.9943        | 8.58                             |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1883-2016       |                                              |                                       | EXPERIENCE BAND 1939-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 79.5                           | 35,087                                       | 108                                   | 0.0031                    | 0.9969        | 8.53                             |
| 80.5                           | 34,532                                       | 452                                   | 0.0131                    | 0.9869        | 8.50                             |
| 81.5                           | 34,055                                       | 783                                   | 0.0230                    | 0.9770        | 8.39                             |
| 82.5                           | 33,149                                       | 381                                   | 0.0115                    | 0.9885        | 8.20                             |
| 83.5                           | 32,768                                       | 269                                   | 0.0082                    | 0.9918        | 8.10                             |
| 84.5                           | 32,500                                       |                                       | 0.0000                    | 1.0000        | 8.04                             |
| 85.5                           | 32,476                                       | 92                                    | 0.0028                    | 0.9972        | 8.04                             |
| 86.5                           | 32,017                                       | 385                                   | 0.0120                    | 0.9880        | 8.01                             |
| 87.5                           | 26,878                                       | 400                                   | 0.0149                    | 0.9851        | 7.92                             |
| 88.5                           | 20,945                                       | 692                                   | 0.0330                    | 0.9670        | 7.80                             |
| 89.5                           | 15,826                                       | 1,346                                 | 0.0850                    | 0.9150        | 7.54                             |
| 90.5                           | 11,277                                       | 507                                   | 0.0450                    | 0.9550        | 6.90                             |
| 91.5                           | 8,168                                        | 324                                   | 0.0397                    | 0.9603        | 6.59                             |
| 92.5                           | 6,613                                        | 597                                   | 0.0903                    | 0.9097        | 6.33                             |
| 93.5                           | 4,350                                        | 233                                   | 0.0537                    | 0.9463        | 5.76                             |
| 94.5                           | 2,650                                        | 117                                   | 0.0440                    | 0.9560        | 5.45                             |
| 95.5                           | 1,904                                        |                                       | 0.0000                    | 1.0000        | 5.21                             |
| 96.5                           | 1,617                                        |                                       | 0.0000                    | 1.0000        | 5.21                             |
| 97.5                           | 1,129                                        | 72                                    | 0.0634                    | 0.9366        | 5.21                             |
| 98.5                           | 337                                          |                                       | 0.0000                    | 1.0000        | 4.88                             |
| 99.5                           | 157                                          |                                       | 0.0000                    | 1.0000        | 4.88                             |
| 100.5                          | 98                                           | 8                                     | 0.0795                    | 0.9205        | 4.88                             |
| 101.5                          | 68                                           |                                       | 0.0000                    | 1.0000        | 4.49                             |
| 102.5                          | 51                                           |                                       | 0.0000                    | 1.0000        | 4.49                             |
| 103.5                          |                                              |                                       |                           |               | 4.49                             |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1883-2016

EXPERIENCE BAND 1970-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 0.0                            | 39,718,139                                   | 16,348                                | 0.0004         | 0.9996        | 100.00                           |
| 0.5                            | 39,265,471                                   | 101,343                               | 0.0026         | 0.9974        | 99.96                            |
| 1.5                            | 36,814,069                                   | 114,388                               | 0.0031         | 0.9969        | 99.70                            |
| 2.5                            | 36,067,916                                   | 32,764                                | 0.0009         | 0.9991        | 99.39                            |
| 3.5                            | 35,302,967                                   | 76,495                                | 0.0022         | 0.9978        | 99.30                            |
| 4.5                            | 34,159,658                                   | 73,217                                | 0.0021         | 0.9979        | 99.09                            |
| 5.5                            | 33,208,691                                   | 71,496                                | 0.0022         | 0.9978        | 98.87                            |
| 6.5                            | 32,581,755                                   | 122,101                               | 0.0037         | 0.9963        | 98.66                            |
| 7.5                            | 31,477,412                                   | 106,750                               | 0.0034         | 0.9966        | 98.29                            |
| 8.5                            | 30,657,840                                   | 129,312                               | 0.0042         | 0.9958        | 97.96                            |
| 9.5                            | 29,900,979                                   | 130,735                               | 0.0044         | 0.9956        | 97.54                            |
| 10.5                           | 29,665,649                                   | 152,236                               | 0.0051         | 0.9949        | 97.12                            |
| 11.5                           | 29,455,135                                   | 173,779                               | 0.0059         | 0.9941        | 96.62                            |
| 12.5                           | 28,568,619                                   | 174,467                               | 0.0061         | 0.9939        | 96.05                            |
| 13.5                           | 27,885,121                                   | 165,876                               | 0.0059         | 0.9941        | 95.46                            |
| 14.5                           | 26,950,801                                   | 205,456                               | 0.0076         | 0.9924        | 94.89                            |
| 15.5                           | 26,714,411                                   | 179,470                               | 0.0067         | 0.9933        | 94.17                            |
| 16.5                           | 26,648,220                                   | 174,914                               | 0.0066         | 0.9934        | 93.54                            |
| 17.5                           | 25,529,829                                   | 192,702                               | 0.0075         | 0.9925        | 92.92                            |
| 18.5                           | 24,561,991                                   | 242,216                               | 0.0099         | 0.9901        | 92.22                            |
| 19.5                           | 23,858,126                                   | 266,939                               | 0.0112         | 0.9888        | 91.31                            |
| 20.5                           | 22,100,605                                   | 246,805                               | 0.0112         | 0.9888        | 90.29                            |
| 21.5                           | 21,978,919                                   | 265,967                               | 0.0121         | 0.9879        | 89.28                            |
| 22.5                           | 21,388,790                                   | 295,383                               | 0.0138         | 0.9862        | 88.20                            |
| 23.5                           | 20,182,356                                   | 283,908                               | 0.0141         | 0.9859        | 86.99                            |
| 24.5                           | 19,082,178                                   | 276,486                               | 0.0145         | 0.9855        | 85.76                            |
| 25.5                           | 18,258,215                                   | 285,150                               | 0.0156         | 0.9844        | 84.52                            |
| 26.5                           | 17,489,752                                   | 300,000                               | 0.0172         | 0.9828        | 83.20                            |
| 27.5                           | 16,439,654                                   | 305,467                               | 0.0186         | 0.9814        | 81.77                            |
| 28.5                           | 15,517,583                                   | 295,833                               | 0.0191         | 0.9809        | 80.25                            |
| 29.5                           | 14,651,469                                   | 328,945                               | 0.0225         | 0.9775        | 78.72                            |
| 30.5                           | 13,764,342                                   | 378,186                               | 0.0275         | 0.9725        | 76.96                            |
| 31.5                           | 12,869,301                                   | 396,907                               | 0.0308         | 0.9692        | 74.84                            |
| 32.5                           | 12,088,442                                   | 373,716                               | 0.0309         | 0.9691        | 72.53                            |
| 33.5                           | 11,380,584                                   | 391,808                               | 0.0344         | 0.9656        | 70.29                            |
| 34.5                           | 10,541,736                                   | 375,219                               | 0.0356         | 0.9644        | 67.87                            |
| 35.5                           | 9,510,507                                    | 327,877                               | 0.0345         | 0.9655        | 65.45                            |
| 36.5                           | 8,573,579                                    | 315,290                               | 0.0368         | 0.9632        | 63.20                            |
| 37.5                           | 7,948,444                                    | 288,398                               | 0.0363         | 0.9637        | 60.87                            |
| 38.5                           | 7,482,611                                    | 269,540                               | 0.0360         | 0.9640        | 58.67                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1883-2016

EXPERIENCE BAND 1970-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 39.5                           | 7,037,473                                    | 254,794                               | 0.0362         | 0.9638        | 56.55                            |
| 40.5                           | 6,752,153                                    | 238,400                               | 0.0353         | 0.9647        | 54.50                            |
| 41.5                           | 6,328,567                                    | 209,910                               | 0.0332         | 0.9668        | 52.58                            |
| 42.5                           | 5,973,292                                    | 241,075                               | 0.0404         | 0.9596        | 50.84                            |
| 43.5                           | 5,624,722                                    | 227,517                               | 0.0404         | 0.9596        | 48.78                            |
| 44.5                           | 5,180,848                                    | 210,777                               | 0.0407         | 0.9593        | 46.81                            |
| 45.5                           | 4,705,197                                    | 206,325                               | 0.0439         | 0.9561        | 44.91                            |
| 46.5                           | 4,368,609                                    | 179,148                               | 0.0410         | 0.9590        | 42.94                            |
| 47.5                           | 4,018,869                                    | 152,660                               | 0.0380         | 0.9620        | 41.18                            |
| 48.5                           | 3,702,477                                    | 141,112                               | 0.0381         | 0.9619        | 39.61                            |
| 49.5                           | 3,331,858                                    | 167,928                               | 0.0504         | 0.9496        | 38.10                            |
| 50.5                           | 2,916,965                                    | 124,891                               | 0.0428         | 0.9572        | 36.18                            |
| 51.5                           | 2,569,147                                    | 138,210                               | 0.0538         | 0.9462        | 34.63                            |
| 52.5                           | 2,230,019                                    | 114,009                               | 0.0511         | 0.9489        | 32.77                            |
| 53.5                           | 1,978,325                                    | 89,803                                | 0.0454         | 0.9546        | 31.09                            |
| 54.5                           | 1,663,772                                    | 80,456                                | 0.0484         | 0.9516        | 29.68                            |
| 55.5                           | 1,343,718                                    | 77,252                                | 0.0575         | 0.9425        | 28.25                            |
| 56.5                           | 1,087,626                                    | 52,317                                | 0.0481         | 0.9519        | 26.62                            |
| 57.5                           | 861,785                                      | 38,059                                | 0.0442         | 0.9558        | 25.34                            |
| 58.5                           | 653,252                                      | 40,776                                | 0.0624         | 0.9376        | 24.22                            |
| 59.5                           | 469,310                                      | 18,890                                | 0.0403         | 0.9597        | 22.71                            |
| 60.5                           | 419,557                                      | 16,866                                | 0.0402         | 0.9598        | 21.80                            |
| 61.5                           | 335,688                                      | 10,768                                | 0.0321         | 0.9679        | 20.92                            |
| 62.5                           | 271,775                                      | 12,867                                | 0.0473         | 0.9527        | 20.25                            |
| 63.5                           | 239,878                                      | 8,912                                 | 0.0372         | 0.9628        | 19.29                            |
| 64.5                           | 196,293                                      | 5,680                                 | 0.0289         | 0.9711        | 18.57                            |
| 65.5                           | 136,596                                      | 3,723                                 | 0.0273         | 0.9727        | 18.04                            |
| 66.5                           | 104,222                                      | 4,066                                 | 0.0390         | 0.9610        | 17.55                            |
| 67.5                           | 83,691                                       | 4,627                                 | 0.0553         | 0.9447        | 16.86                            |
| 68.5                           | 63,804                                       | 3,407                                 | 0.0534         | 0.9466        | 15.93                            |
| 69.5                           | 58,183                                       | 4,272                                 | 0.0734         | 0.9266        | 15.08                            |
| 70.5                           | 49,814                                       | 2,562                                 | 0.0514         | 0.9486        | 13.97                            |
| 71.5                           | 46,574                                       | 642                                   | 0.0138         | 0.9862        | 13.25                            |
| 72.5                           | 45,818                                       | 455                                   | 0.0099         | 0.9901        | 13.07                            |
| 73.5                           | 43,537                                       | 764                                   | 0.0175         | 0.9825        | 12.94                            |
| 74.5                           | 39,987                                       | 918                                   | 0.0229         | 0.9771        | 12.71                            |
| 75.5                           | 37,047                                       |                                       | 0.0000         | 1.0000        | 12.42                            |
| 76.5                           | 37,047                                       | 194                                   | 0.0052         | 0.9948        | 12.42                            |
| 77.5                           | 36,447                                       | 870                                   | 0.0239         | 0.9761        | 12.36                            |
| 78.5                           | 35,355                                       | 203                                   | 0.0058         | 0.9942        | 12.06                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

ORIGINAL LIFE TABLE, CONT.

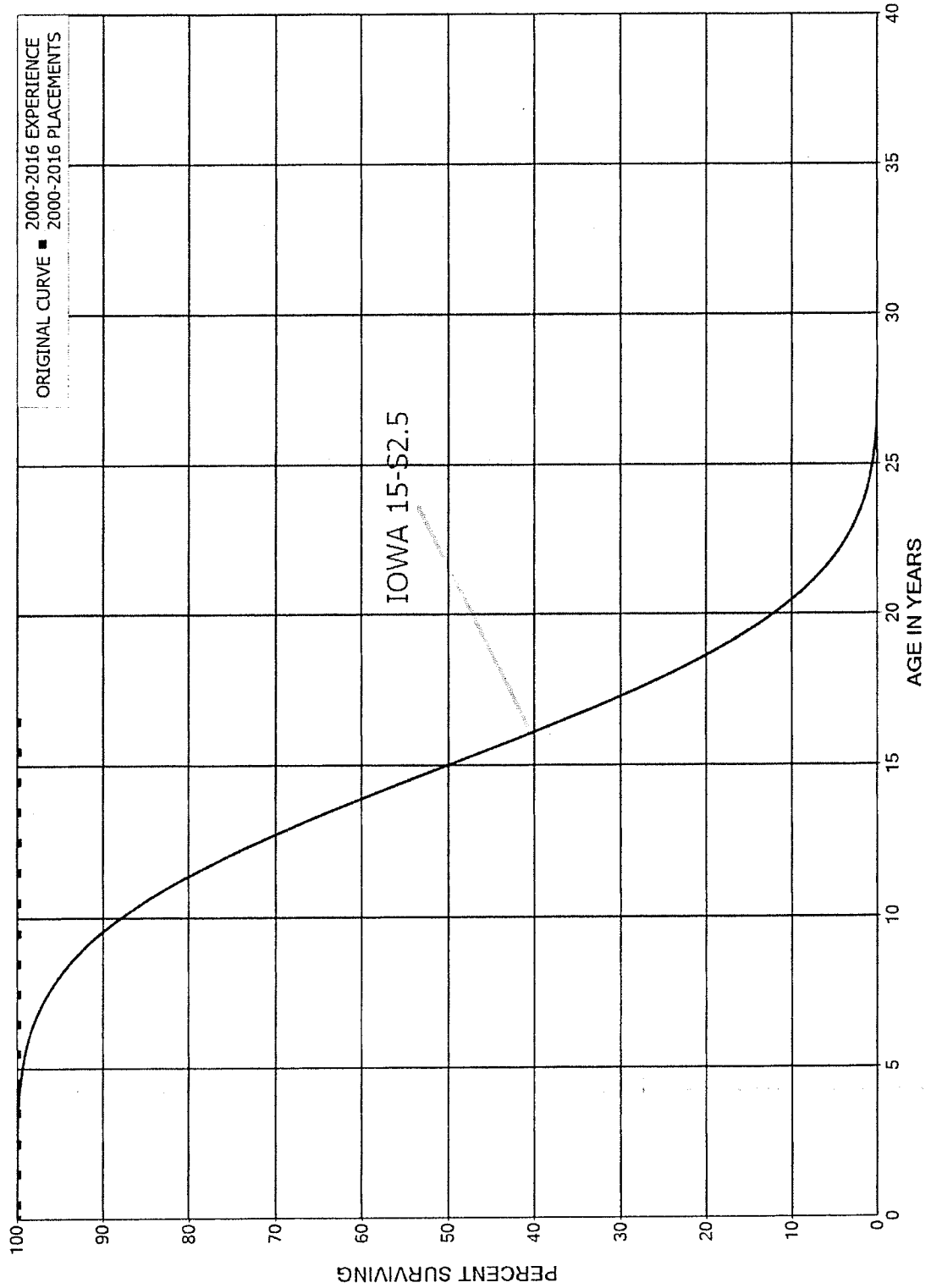
PLACEMENT BAND 1883-2016

EXPERIENCE BAND 1970-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 79.5                           | 35,079                                       | 108                                   | 0.0031         | 0.9969        | 11.99                            |
| 80.5                           | 34,525                                       | 452                                   | 0.0131         | 0.9869        | 11.96                            |
| 81.5                           | 34,047                                       | 783                                   | 0.0230         | 0.9770        | 11.80                            |
| 82.5                           | 33,141                                       | 381                                   | 0.0115         | 0.9885        | 11.53                            |
| 83.5                           | 32,761                                       | 269                                   | 0.0082         | 0.9918        | 11.39                            |
| 84.5                           | 32,492                                       |                                       | 0.0000         | 1.0000        | 11.30                            |
| 85.5                           | 32,468                                       | 92                                    | 0.0028         | 0.9972        | 11.30                            |
| 86.5                           | 32,017                                       | 385                                   | 0.0120         | 0.9880        | 11.27                            |
| 87.5                           | 26,878                                       | 400                                   | 0.0149         | 0.9851        | 11.13                            |
| 88.5                           | 20,945                                       | 692                                   | 0.0330         | 0.9670        | 10.97                            |
| 89.5                           | 15,826                                       | 1,346                                 | 0.0850         | 0.9150        | 10.61                            |
| 90.5                           | 11,277                                       | 507                                   | 0.0450         | 0.9550        | 9.70                             |
| 91.5                           | 8,168                                        | 324                                   | 0.0397         | 0.9603        | 9.27                             |
| 92.5                           | 6,613                                        | 597                                   | 0.0903         | 0.9097        | 8.90                             |
| 93.5                           | 4,350                                        | 233                                   | 0.0537         | 0.9463        | 8.10                             |
| 94.5                           | 2,650                                        | 117                                   | 0.0440         | 0.9560        | 7.66                             |
| 95.5                           | 1,904                                        |                                       | 0.0000         | 1.0000        | 7.32                             |
| 96.5                           | 1,617                                        |                                       | 0.0000         | 1.0000        | 7.32                             |
| 97.5                           | 1,129                                        | 72                                    | 0.0634         | 0.9366        | 7.32                             |
| 98.5                           | 337                                          |                                       | 0.0000         | 1.0000        | 6.86                             |
| 99.5                           | 157                                          |                                       | 0.0000         | 1.0000        | 6.86                             |
| 100.5                          | 98                                           | 8                                     | 0.0795         | 0.9205        | 6.86                             |
| 101.5                          | 68                                           |                                       | 0.0000         | 1.0000        | 6.31                             |
| 102.5                          | 51                                           |                                       | 0.0000         | 1.0000        | 6.31                             |
| 103.5                          |                                              |                                       |                |               | 6.31                             |



COLUMBIA GAS OF PENNSYLVANIA, INC.  
 ACCOUNT 381.1 METERS - AMR  
 ORIGINAL AND SMOOTH SURVIVOR CURVES



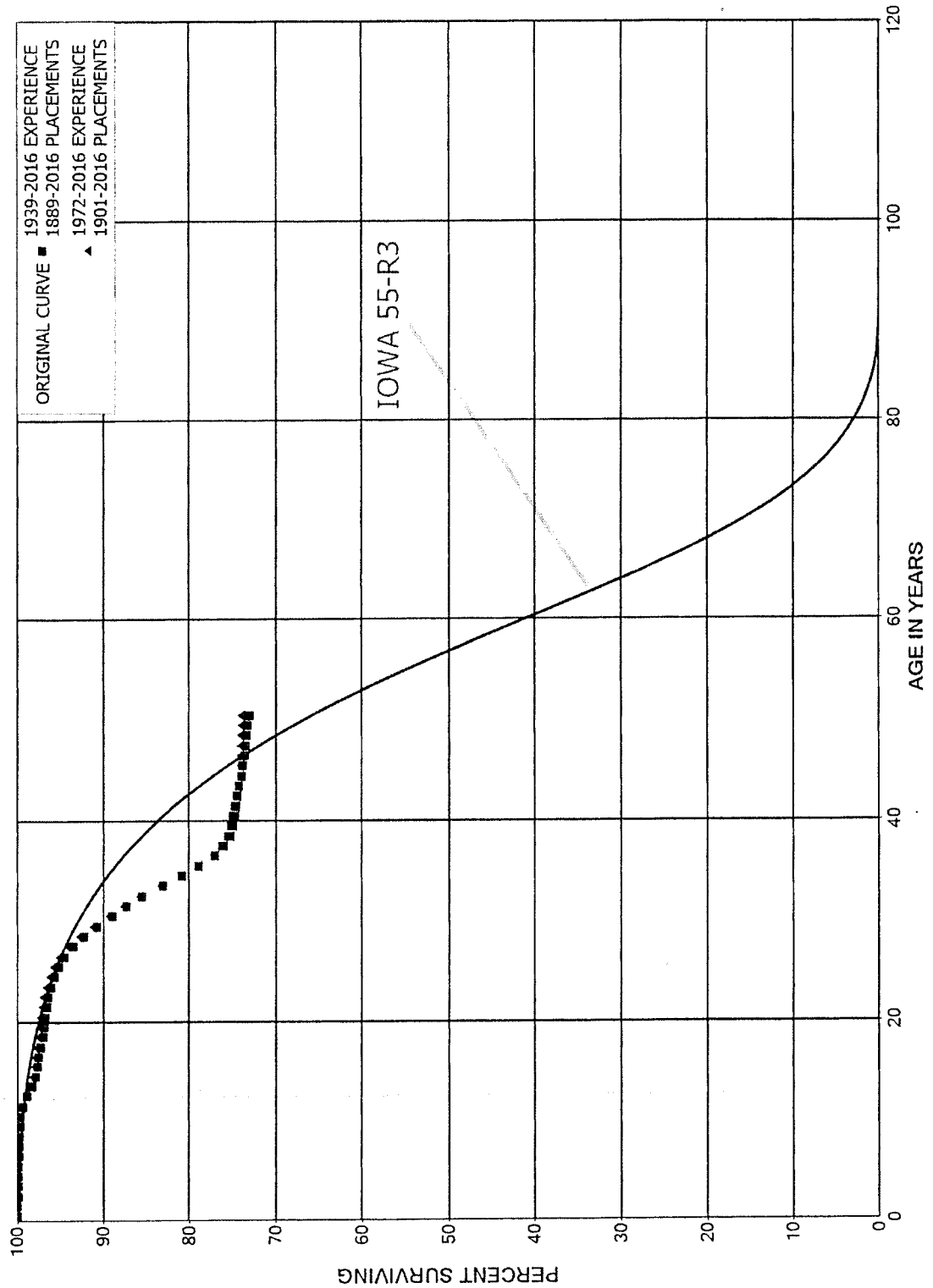
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381.1 METERS - AMR

ORIGINAL LIFE TABLE

| PLACEMENT BAND 2000-2016       |                                              |                                       | EXPERIENCE BAND 2000-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 0.0                            | 23,225,985                                   |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 0.5                            | 22,833,262                                   |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 1.5                            | 22,460,821                                   |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 2.5                            | 22,153,884                                   |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 3.5                            | 22,153,884                                   |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 4.5                            | 13,657,760                                   |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 5.5                            | 2,691,098                                    |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 6.5                            | 1,866,230                                    |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 7.5                            | 1,445,446                                    |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 8.5                            | 959,960                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 9.5                            | 852,549                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 10.5                           | 852,549                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 11.5                           | 683,513                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 12.5                           | 575,687                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 13.5                           | 575,173                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 14.5                           | 575,173                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 15.5                           | 296,427                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 16.5                           |                                              |                                       |                           |               | 100.00                           |

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 1889-2016       |                                              |                                       | EXPERIENCE BAND 1939-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 0.0                            | 38,007,951                                   | 1,375                                 | 0.0000                    | 1.0000        | 100.00                           |
| 0.5                            | 36,692,366                                   | 16,816                                | 0.0005                    | 0.9995        | 100.00                           |
| 1.5                            | 35,355,716                                   | 25,396                                | 0.0007                    | 0.9993        | 99.95                            |
| 2.5                            | 34,133,870                                   | 10,075                                | 0.0003                    | 0.9997        | 99.88                            |
| 3.5                            | 33,139,968                                   | 11,878                                | 0.0004                    | 0.9996        | 99.85                            |
| 4.5                            | 31,507,823                                   | 2,338                                 | 0.0001                    | 0.9999        | 99.81                            |
| 5.5                            | 29,969,861                                   | 15,595                                | 0.0005                    | 0.9995        | 99.81                            |
| 6.5                            | 28,546,568                                   | 6,767                                 | 0.0002                    | 0.9998        | 99.75                            |
| 7.5                            | 26,712,553                                   | 5,968                                 | 0.0002                    | 0.9998        | 99.73                            |
| 8.5                            | 25,316,925                                   | 17,885                                | 0.0007                    | 0.9993        | 99.71                            |
| 9.5                            | 22,386,998                                   | 5,911                                 | 0.0003                    | 0.9997        | 99.64                            |
| 10.5                           | 22,206,967                                   | 81,585                                | 0.0037                    | 0.9963        | 99.61                            |
| 11.5                           | 21,388,041                                   | 84,118                                | 0.0039                    | 0.9961        | 99.25                            |
| 12.5                           | 20,261,965                                   | 118,009                               | 0.0058                    | 0.9942        | 98.86                            |
| 13.5                           | 19,072,089                                   | 89,239                                | 0.0047                    | 0.9953        | 98.28                            |
| 14.5                           | 18,004,681                                   | 44,604                                | 0.0025                    | 0.9975        | 97.82                            |
| 15.5                           | 16,955,589                                   | 20,322                                | 0.0012                    | 0.9988        | 97.58                            |
| 16.5                           | 15,804,461                                   | 28,914                                | 0.0018                    | 0.9982        | 97.46                            |
| 17.5                           | 15,269,166                                   | 50,053                                | 0.0033                    | 0.9967        | 97.28                            |
| 18.5                           | 14,616,237                                   | 19,942                                | 0.0014                    | 0.9986        | 96.96                            |
| 19.5                           | 13,883,663                                   | 22,028                                | 0.0016                    | 0.9984        | 96.83                            |
| 20.5                           | 13,113,042                                   | 20,046                                | 0.0015                    | 0.9985        | 96.68                            |
| 21.5                           | 12,437,520                                   | 21,610                                | 0.0017                    | 0.9983        | 96.53                            |
| 22.5                           | 11,670,698                                   | 39,237                                | 0.0034                    | 0.9966        | 96.36                            |
| 23.5                           | 10,986,161                                   | 44,883                                | 0.0041                    | 0.9959        | 96.04                            |
| 24.5                           | 10,178,815                                   | 44,649                                | 0.0044                    | 0.9956        | 95.65                            |
| 25.5                           | 9,435,528                                    | 69,466                                | 0.0074                    | 0.9926        | 95.23                            |
| 26.5                           | 8,586,623                                    | 88,459                                | 0.0103                    | 0.9897        | 94.52                            |
| 27.5                           | 7,730,611                                    | 103,824                               | 0.0134                    | 0.9866        | 93.55                            |
| 28.5                           | 6,953,848                                    | 115,472                               | 0.0166                    | 0.9834        | 92.29                            |
| 29.5                           | 6,265,572                                    | 126,717                               | 0.0202                    | 0.9798        | 90.76                            |
| 30.5                           | 5,610,522                                    | 104,173                               | 0.0186                    | 0.9814        | 88.93                            |
| 31.5                           | 5,051,104                                    | 103,451                               | 0.0205                    | 0.9795        | 87.28                            |
| 32.5                           | 4,509,172                                    | 125,524                               | 0.0278                    | 0.9722        | 85.49                            |
| 33.5                           | 4,022,568                                    | 109,756                               | 0.0273                    | 0.9727        | 83.11                            |
| 34.5                           | 3,604,111                                    | 86,669                                | 0.0240                    | 0.9760        | 80.84                            |
| 35.5                           | 3,122,007                                    | 70,663                                | 0.0226                    | 0.9774        | 78.90                            |
| 36.5                           | 2,755,539                                    | 32,826                                | 0.0119                    | 0.9881        | 77.11                            |
| 37.5                           | 2,607,725                                    | 24,070                                | 0.0092                    | 0.9908        | 76.19                            |
| 38.5                           | 2,545,469                                    | 10,606                                | 0.0042                    | 0.9958        | 75.49                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 382 METER INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1889-2016       |                                              |                                       | EXPERIENCE BAND 1939-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 39.5                           | 2,486,624                                    | 8,818                                 | 0.0035                    | 0.9965        | 75.17                            |
| 40.5                           | 2,435,050                                    | 6,832                                 | 0.0028                    | 0.9972        | 74.91                            |
| 41.5                           | 2,405,902                                    | 7,881                                 | 0.0033                    | 0.9967        | 74.70                            |
| 42.5                           | 2,385,766                                    | 7,024                                 | 0.0029                    | 0.9971        | 74.45                            |
| 43.5                           | 2,304,276                                    | 9,056                                 | 0.0039                    | 0.9961        | 74.23                            |
| 44.5                           | 2,217,199                                    | 4,061                                 | 0.0018                    | 0.9982        | 73.94                            |
| 45.5                           | 2,085,536                                    | 4,684                                 | 0.0022                    | 0.9978        | 73.81                            |
| 46.5                           | 1,966,612                                    | 3,652                                 | 0.0019                    | 0.9981        | 73.64                            |
| 47.5                           | 1,801,047                                    | 2,898                                 | 0.0016                    | 0.9984        | 73.50                            |
| 48.5                           | 1,627,062                                    | 3,333                                 | 0.0020                    | 0.9980        | 73.39                            |
| 49.5                           | 1,490,524                                    | 3,331                                 | 0.0022                    | 0.9978        | 73.24                            |
| 50.5                           | 1,342,546                                    | 5,988                                 | 0.0045                    | 0.9955        | 73.07                            |
| 51.5                           | 1,180,356                                    | 2,065                                 | 0.0017                    | 0.9983        | 72.75                            |
| 52.5                           | 1,060,564                                    | 1,903                                 | 0.0018                    | 0.9982        | 72.62                            |
| 53.5                           | 992,996                                      | 966                                   | 0.0010                    | 0.9990        | 72.49                            |
| 54.5                           | 930,341                                      | 535                                   | 0.0006                    | 0.9994        | 72.42                            |
| 55.5                           | 886,671                                      | 662                                   | 0.0007                    | 0.9993        | 72.38                            |
| 56.5                           | 836,220                                      | 269                                   | 0.0003                    | 0.9997        | 72.32                            |
| 57.5                           | 767,611                                      | 472                                   | 0.0006                    | 0.9994        | 72.30                            |
| 58.5                           | 710,234                                      | 120                                   | 0.0002                    | 0.9998        | 72.25                            |
| 59.5                           | 666,126                                      | 422                                   | 0.0006                    | 0.9994        | 72.24                            |
| 60.5                           | 617,837                                      | 43,389                                | 0.0702                    | 0.9298        | 72.20                            |
| 61.5                           | 529,067                                      | 29,739                                | 0.0562                    | 0.9438        | 67.13                            |
| 62.5                           | 463,159                                      | 6,412                                 | 0.0138                    | 0.9862        | 63.35                            |
| 63.5                           | 418,221                                      | 4,513                                 | 0.0108                    | 0.9892        | 62.48                            |
| 64.5                           | 381,479                                      | 2,952                                 | 0.0077                    | 0.9923        | 61.80                            |
| 65.5                           | 347,576                                      | 5,148                                 | 0.0148                    | 0.9852        | 61.32                            |
| 66.5                           | 306,900                                      | 1,397                                 | 0.0046                    | 0.9954        | 60.42                            |
| 67.5                           | 274,919                                      | 15,733                                | 0.0572                    | 0.9428        | 60.14                            |
| 68.5                           | 235,473                                      | 13,356                                | 0.0567                    | 0.9433        | 56.70                            |
| 69.5                           | 203,433                                      | 30,526                                | 0.1501                    | 0.8499        | 53.48                            |
| 70.5                           | 160,064                                      | 22,164                                | 0.1385                    | 0.8615        | 45.46                            |
| 71.5                           | 132,599                                      | 26,463                                | 0.1996                    | 0.8004        | 39.16                            |
| 72.5                           | 102,082                                      | 35,712                                | 0.3498                    | 0.6502        | 31.35                            |
| 73.5                           | 62,276                                       | 884                                   | 0.0142                    | 0.9858        | 20.38                            |
| 74.5                           | 52,633                                       | 2,673                                 | 0.0508                    | 0.9492        | 20.09                            |
| 75.5                           | 38,247                                       | 1,302                                 | 0.0340                    | 0.9660        | 19.07                            |
| 76.5                           | 28,693                                       | 252                                   | 0.0088                    | 0.9912        | 18.42                            |
| 77.5                           | 19,049                                       | 218                                   | 0.0114                    | 0.9886        | 18.26                            |
| 78.5                           | 6,109                                        | 141                                   | 0.0231                    | 0.9769        | 18.05                            |
| 79.5                           |                                              |                                       |                           |               | 17.63                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 382 METER INSTALLATIONS

ORIGINAL LIFE TABLE

| PLACEMENT BAND 1901-2016       |                                              |                                       | EXPERIENCE BAND 1972-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 0.0                            | 35,892,107                                   | 1,375                                 | 0.0000                    | 1.0000        | 100.00                           |
| 0.5                            | 34,653,065                                   | 13,746                                | 0.0004                    | 0.9996        | 100.00                           |
| 1.5                            | 33,422,893                                   | 25,295                                | 0.0008                    | 0.9992        | 99.96                            |
| 2.5                            | 32,322,198                                   | 9,724                                 | 0.0003                    | 0.9997        | 99.88                            |
| 3.5                            | 31,454,646                                   | 11,500                                | 0.0004                    | 0.9996        | 99.85                            |
| 4.5                            | 29,959,291                                   | 2,147                                 | 0.0001                    | 0.9999        | 99.81                            |
| 5.5                            | 28,586,309                                   | 15,309                                | 0.0005                    | 0.9995        | 99.81                            |
| 6.5                            | 27,347,506                                   | 6,725                                 | 0.0002                    | 0.9998        | 99.75                            |
| 7.5                            | 25,646,387                                   | 5,909                                 | 0.0002                    | 0.9998        | 99.73                            |
| 8.5                            | 24,318,118                                   | 17,848                                | 0.0007                    | 0.9993        | 99.71                            |
| 9.5                            | 21,438,187                                   | 5,852                                 | 0.0003                    | 0.9997        | 99.63                            |
| 10.5                           | 21,296,855                                   | 81,114                                | 0.0038                    | 0.9962        | 99.61                            |
| 11.5                           | 20,532,103                                   | 83,989                                | 0.0041                    | 0.9959        | 99.23                            |
| 12.5                           | 19,478,733                                   | 102,192                               | 0.0052                    | 0.9948        | 98.82                            |
| 13.5                           | 18,362,381                                   | 53,444                                | 0.0029                    | 0.9971        | 98.30                            |
| 14.5                           | 17,375,761                                   | 33,222                                | 0.0019                    | 0.9981        | 98.02                            |
| 15.5                           | 16,377,725                                   | 14,924                                | 0.0009                    | 0.9991        | 97.83                            |
| 16.5                           | 15,277,241                                   | 19,395                                | 0.0013                    | 0.9987        | 97.74                            |
| 17.5                           | 14,787,779                                   | 34,077                                | 0.0023                    | 0.9977        | 97.62                            |
| 18.5                           | 14,187,574                                   | 15,527                                | 0.0011                    | 0.9989        | 97.39                            |
| 19.5                           | 13,492,700                                   | 21,373                                | 0.0016                    | 0.9984        | 97.28                            |
| 20.5                           | 12,755,683                                   | 18,679                                | 0.0015                    | 0.9985        | 97.13                            |
| 21.5                           | 12,124,154                                   | 21,243                                | 0.0018                    | 0.9982        | 96.99                            |
| 22.5                           | 11,387,251                                   | 38,230                                | 0.0034                    | 0.9966        | 96.82                            |
| 23.5                           | 10,726,802                                   | 44,612                                | 0.0042                    | 0.9958        | 96.49                            |
| 24.5                           | 9,936,756                                    | 44,349                                | 0.0045                    | 0.9955        | 96.09                            |
| 25.5                           | 9,203,859                                    | 69,407                                | 0.0075                    | 0.9925        | 95.66                            |
| 26.5                           | 8,355,424                                    | 87,974                                | 0.0105                    | 0.9895        | 94.94                            |
| 27.5                           | 7,498,305                                    | 102,928                               | 0.0137                    | 0.9863        | 93.94                            |
| 28.5                           | 6,718,749                                    | 114,998                               | 0.0171                    | 0.9829        | 92.65                            |
| 29.5                           | 6,009,470                                    | 126,422                               | 0.0210                    | 0.9790        | 91.07                            |
| 30.5                           | 5,363,397                                    | 102,024                               | 0.0190                    | 0.9810        | 89.15                            |
| 31.5                           | 4,814,069                                    | 99,313                                | 0.0206                    | 0.9794        | 87.45                            |
| 32.5                           | 4,303,180                                    | 125,342                               | 0.0291                    | 0.9709        | 85.65                            |
| 33.5                           | 3,827,105                                    | 109,688                               | 0.0287                    | 0.9713        | 83.16                            |
| 34.5                           | 3,409,613                                    | 86,602                                | 0.0254                    | 0.9746        | 80.77                            |
| 35.5                           | 2,928,773                                    | 70,478                                | 0.0241                    | 0.9759        | 78.72                            |
| 36.5                           | 2,555,139                                    | 32,726                                | 0.0128                    | 0.9872        | 76.83                            |
| 37.5                           | 2,403,607                                    | 23,823                                | 0.0099                    | 0.9901        | 75.84                            |
| 38.5                           | 2,334,294                                    | 10,158                                | 0.0044                    | 0.9956        | 75.09                            |

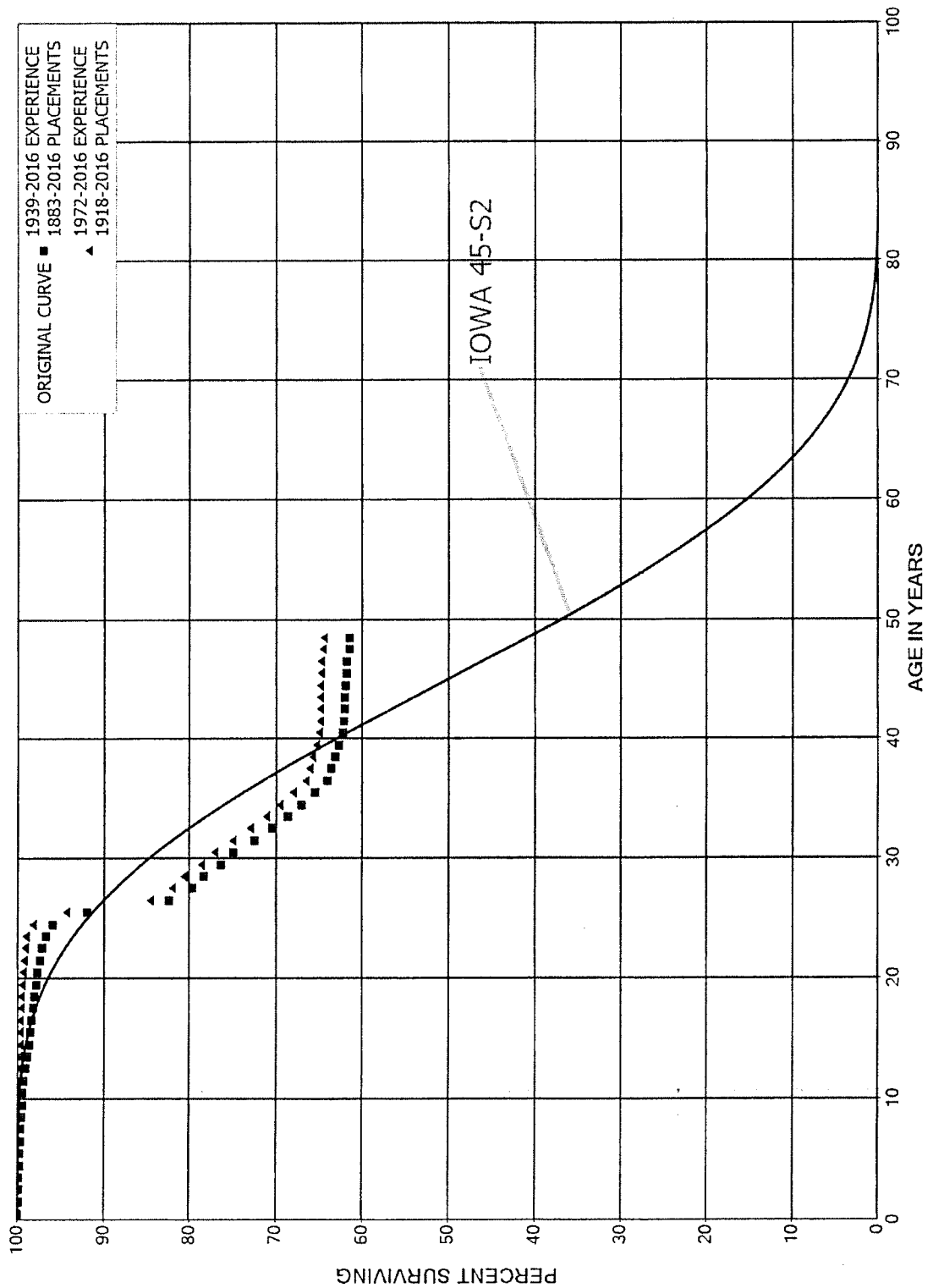
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 382 METER INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1901-2016       |                                              |                                       | EXPERIENCE BAND 1972-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 39.5                           | 2,274,006                                    | 7,494                                 | 0.0033                    | 0.9967        | 74.76                            |
| 40.5                           | 2,224,621                                    | 4,189                                 | 0.0019                    | 0.9981        | 74.52                            |
| 41.5                           | 2,205,398                                    | 3,842                                 | 0.0017                    | 0.9983        | 74.38                            |
| 42.5                           | 2,202,742                                    | 3,174                                 | 0.0014                    | 0.9986        | 74.25                            |
| 43.5                           | 2,135,896                                    | 4,961                                 | 0.0023                    | 0.9977        | 74.14                            |
| 44.5                           | 2,055,522                                    | 574                                   | 0.0003                    | 0.9997        | 73.97                            |
| 45.5                           | 1,933,799                                    | 966                                   | 0.0005                    | 0.9995        | 73.95                            |
| 46.5                           | 1,791,395                                    | 210                                   | 0.0001                    | 0.9999        | 73.91                            |
| 47.5                           | 1,633,747                                    | 225                                   | 0.0001                    | 0.9999        | 73.90                            |
| 48.5                           | 1,465,097                                    | 704                                   | 0.0005                    | 0.9995        | 73.89                            |
| 49.5                           | 1,333,649                                    | 461                                   | 0.0003                    | 0.9997        | 73.86                            |
| 50.5                           | 1,189,415                                    | 2,158                                 | 0.0018                    | 0.9982        | 73.83                            |
| 51.5                           | 1,031,580                                    | 909                                   | 0.0009                    | 0.9991        | 73.70                            |
| 52.5                           | 913,015                                      | 679                                   | 0.0007                    | 0.9993        | 73.63                            |
| 53.5                           | 846,654                                      | 397                                   | 0.0005                    | 0.9995        | 73.58                            |
| 54.5                           | 786,217                                      | 267                                   | 0.0003                    | 0.9997        | 73.54                            |
| 55.5                           | 746,150                                      | 388                                   | 0.0005                    | 0.9995        | 73.52                            |
| 56.5                           | 700,539                                      | 170                                   | 0.0002                    | 0.9998        | 73.48                            |
| 57.5                           | 636,558                                      | 412                                   | 0.0006                    | 0.9994        | 73.46                            |
| 58.5                           | 583,179                                      |                                       | 0.0000                    | 1.0000        | 73.41                            |
| 59.5                           | 542,697                                      | 335                                   | 0.0006                    | 0.9994        | 73.41                            |
| 60.5                           | 497,808                                      | 43,315                                | 0.0870                    | 0.9130        | 73.37                            |
| 61.5                           | 413,371                                      | 29,647                                | 0.0717                    | 0.9283        | 66.98                            |
| 62.5                           | 351,664                                      | 6,275                                 | 0.0178                    | 0.9822        | 62.18                            |
| 63.5                           | 312,706                                      | 4,509                                 | 0.0144                    | 0.9856        | 61.07                            |
| 64.5                           | 280,771                                      | 2,913                                 | 0.0104                    | 0.9896        | 60.19                            |
| 65.5                           | 250,911                                      | 5,120                                 | 0.0204                    | 0.9796        | 59.57                            |
| 66.5                           | 214,597                                      | 1,372                                 | 0.0064                    | 0.9936        | 58.35                            |
| 67.5                           | 188,711                                      | 771                                   | 0.0041                    | 0.9959        | 57.98                            |
| 68.5                           | 168,781                                      | 5,774                                 | 0.0342                    | 0.9658        | 57.74                            |
| 69.5                           | 155,054                                      | 12,169                                | 0.0785                    | 0.9215        | 55.77                            |
| 70.5                           | 131,905                                      | 15,845                                | 0.1201                    | 0.8799        | 51.39                            |
| 71.5                           | 110,759                                      | 20,903                                | 0.1887                    | 0.8113        | 45.22                            |
| 72.5                           | 85,803                                       | 19,668                                | 0.2292                    | 0.7708        | 36.68                            |
| 73.5                           | 62,171                                       | 778                                   | 0.0125                    | 0.9875        | 28.27                            |
| 74.5                           | 52,633                                       | 2,673                                 | 0.0508                    | 0.9492        | 27.92                            |
| 75.5                           | 38,247                                       | 1,302                                 | 0.0340                    | 0.9660        | 26.50                            |
| 76.5                           | 28,693                                       | 252                                   | 0.0088                    | 0.9912        | 25.60                            |
| 77.5                           | 19,049                                       | 218                                   | 0.0114                    | 0.9886        | 25.38                            |
| 78.5                           | 6,109                                        | 141                                   | 0.0231                    | 0.9769        | 25.09                            |
| 79.5                           |                                              |                                       |                           |               | 24.51                            |

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 1883-2016

EXPERIENCE BAND 1939-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 0.0                            | 11,740,633                                   | 1,022                                 | 0.0001         | 0.9999        | 100.00                           |
| 0.5                            | 11,228,744                                   | 12,798                                | 0.0011         | 0.9989        | 99.99                            |
| 1.5                            | 10,685,793                                   | 3,031                                 | 0.0003         | 0.9997        | 99.88                            |
| 2.5                            | 10,066,372                                   | 6,093                                 | 0.0006         | 0.9994        | 99.85                            |
| 3.5                            | 9,569,880                                    | 3,593                                 | 0.0004         | 0.9996        | 99.79                            |
| 4.5                            | 8,896,678                                    | 5,960                                 | 0.0007         | 0.9993        | 99.75                            |
| 5.5                            | 8,198,520                                    | 2,584                                 | 0.0003         | 0.9997        | 99.68                            |
| 6.5                            | 7,582,910                                    | 4,472                                 | 0.0006         | 0.9994        | 99.65                            |
| 7.5                            | 6,797,982                                    | 6,143                                 | 0.0009         | 0.9991        | 99.59                            |
| 8.5                            | 6,249,577                                    | 6,366                                 | 0.0010         | 0.9990        | 99.50                            |
| 9.5                            | 5,396,449                                    | 1,514                                 | 0.0003         | 0.9997        | 99.40                            |
| 10.5                           | 4,978,329                                    | 4,880                                 | 0.0010         | 0.9990        | 99.37                            |
| 11.5                           | 4,261,490                                    | 10,705                                | 0.0025         | 0.9975        | 99.28                            |
| 12.5                           | 3,362,469                                    | 7,478                                 | 0.0022         | 0.9978        | 99.03                            |
| 13.5                           | 2,819,498                                    | 4,556                                 | 0.0016         | 0.9984        | 98.81                            |
| 14.5                           | 2,441,422                                    | 3,516                                 | 0.0014         | 0.9986        | 98.65                            |
| 15.5                           | 2,376,326                                    | 3,371                                 | 0.0014         | 0.9986        | 98.51                            |
| 16.5                           | 2,196,681                                    | 4,474                                 | 0.0020         | 0.9980        | 98.37                            |
| 17.5                           | 2,176,899                                    | 2,612                                 | 0.0012         | 0.9988        | 98.17                            |
| 18.5                           | 2,142,248                                    | 4,368                                 | 0.0020         | 0.9980        | 98.05                            |
| 19.5                           | 2,041,759                                    | 3,446                                 | 0.0017         | 0.9983        | 97.85                            |
| 20.5                           | 1,953,750                                    | 5,079                                 | 0.0026         | 0.9974        | 97.68                            |
| 21.5                           | 1,870,012                                    | 5,676                                 | 0.0030         | 0.9970        | 97.43                            |
| 22.5                           | 1,791,105                                    | 7,261                                 | 0.0041         | 0.9959        | 97.13                            |
| 23.5                           | 1,724,001                                    | 14,949                                | 0.0087         | 0.9913        | 96.74                            |
| 24.5                           | 1,624,292                                    | 67,311                                | 0.0414         | 0.9586        | 95.90                            |
| 25.5                           | 1,479,212                                    | 153,652                               | 0.1039         | 0.8961        | 91.93                            |
| 26.5                           | 1,233,308                                    | 39,645                                | 0.0321         | 0.9679        | 82.38                            |
| 27.5                           | 1,099,345                                    | 18,218                                | 0.0166         | 0.9834        | 79.73                            |
| 28.5                           | 993,319                                      | 24,940                                | 0.0251         | 0.9749        | 78.41                            |
| 29.5                           | 901,803                                      | 17,989                                | 0.0199         | 0.9801        | 76.44                            |
| 30.5                           | 817,457                                      | 25,856                                | 0.0316         | 0.9684        | 74.92                            |
| 31.5                           | 740,431                                      | 22,254                                | 0.0301         | 0.9699        | 72.55                            |
| 32.5                           | 668,209                                      | 17,036                                | 0.0255         | 0.9745        | 70.37                            |
| 33.5                           | 605,319                                      | 13,693                                | 0.0226         | 0.9774        | 68.57                            |
| 34.5                           | 547,037                                      | 12,341                                | 0.0226         | 0.9774        | 67.02                            |
| 35.5                           | 487,414                                      | 10,806                                | 0.0222         | 0.9778        | 65.51                            |
| 36.5                           | 446,060                                      | 3,409                                 | 0.0076         | 0.9924        | 64.06                            |
| 37.5                           | 427,983                                      | 2,358                                 | 0.0055         | 0.9945        | 63.57                            |
| 38.5                           | 420,108                                      | 3,540                                 | 0.0084         | 0.9916        | 63.22                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 383 HOUSE REGULATORS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1883-2016

EXPERIENCE BAND 1939-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 39.5                           | 412,194                                      | 2,608                                 | 0.0063         | 0.9937        | 62.68                            |
| 40.5                           | 405,616                                      | 720                                   | 0.0018         | 0.9982        | 62.29                            |
| 41.5                           | 403,649                                      | 534                                   | 0.0013         | 0.9987        | 62.18                            |
| 42.5                           | 400,615                                      | 350                                   | 0.0009         | 0.9991        | 62.09                            |
| 43.5                           | 377,975                                      | 525                                   | 0.0014         | 0.9986        | 62.04                            |
| 44.5                           | 352,948                                      | 572                                   | 0.0016         | 0.9984        | 61.95                            |
| 45.5                           | 308,832                                      | 285                                   | 0.0009         | 0.9991        | 61.85                            |
| 46.5                           | 256,717                                      | 1,179                                 | 0.0046         | 0.9954        | 61.80                            |
| 47.5                           | 208,391                                      | 198                                   | 0.0010         | 0.9990        | 61.51                            |
| 48.5                           | 157,042                                      | 164                                   | 0.0010         | 0.9990        | 61.45                            |
| 49.5                           | 117,259                                      | 130                                   | 0.0011         | 0.9989        | 61.39                            |
| 50.5                           | 66,127                                       | 381                                   | 0.0058         | 0.9942        | 61.32                            |
| 51.5                           | 45,868                                       | 405                                   | 0.0088         | 0.9912        | 60.97                            |
| 52.5                           | 30,621                                       | 860                                   | 0.0281         | 0.9719        | 60.43                            |
| 53.5                           | 18,568                                       | 388                                   | 0.0209         | 0.9791        | 58.73                            |
| 54.5                           | 11,318                                       | 374                                   | 0.0330         | 0.9670        | 57.50                            |
| 55.5                           | 10,045                                       | 391                                   | 0.0389         | 0.9611        | 55.60                            |
| 56.5                           | 9,300                                        | 164                                   | 0.0176         | 0.9824        | 53.44                            |
| 57.5                           | 9,136                                        | 301                                   | 0.0329         | 0.9671        | 52.50                            |
| 58.5                           | 8,130                                        | 197                                   | 0.0243         | 0.9757        | 50.77                            |
| 59.5                           | 7,442                                        | 197                                   | 0.0265         | 0.9735        | 49.54                            |
| 60.5                           | 7,215                                        | 61                                    | 0.0084         | 0.9916        | 48.23                            |
| 61.5                           | 6,707                                        | 239                                   | 0.0356         | 0.9644        | 47.82                            |
| 62.5                           | 6,468                                        | 292                                   | 0.0451         | 0.9549        | 46.12                            |
| 63.5                           | 6,066                                        | 396                                   | 0.0652         | 0.9348        | 44.04                            |
| 64.5                           | 5,670                                        | 259                                   | 0.0457         | 0.9543        | 41.16                            |
| 65.5                           | 5,411                                        | 276                                   | 0.0509         | 0.9491        | 39.28                            |
| 66.5                           | 5,136                                        | 170                                   | 0.0332         | 0.9668        | 37.28                            |
| 67.5                           | 4,888                                        | 1,074                                 | 0.2197         | 0.7803        | 36.05                            |
| 68.5                           | 3,814                                        | 376                                   | 0.0986         | 0.9014        | 28.13                            |
| 69.5                           | 3,438                                        | 84                                    | 0.0244         | 0.9756        | 25.36                            |
| 70.5                           | 3,354                                        | 588                                   | 0.1753         | 0.8247        | 24.74                            |
| 71.5                           | 2,766                                        | 41                                    | 0.0150         | 0.9850        | 20.40                            |
| 72.5                           | 2,701                                        |                                       | 0.0000         | 1.0000        | 20.09                            |
| 73.5                           | 2,701                                        | 460                                   | 0.1702         | 0.8298        | 20.09                            |
| 74.5                           | 2,241                                        | 194                                   | 0.0866         | 0.9134        | 16.67                            |
| 75.5                           | 2,023                                        |                                       | 0.0000         | 1.0000        | 15.23                            |
| 76.5                           | 2,023                                        | 770                                   | 0.3803         | 0.6197        | 15.23                            |
| 77.5                           | 1,176                                        | 465                                   | 0.3956         | 0.6044        | 9.44                             |
| 78.5                           | 696                                          | 48                                    | 0.0690         | 0.9310        | 5.70                             |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 383 HOUSE REGULATORS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1883-2016

EXPERIENCE BAND 1939-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 79.5                           | 648                                          | 135                                   | 0.2085         | 0.7915        | 5.31                             |
| 80.5                           | 513                                          | 75                                    | 0.1460         | 0.8540        | 4.20                             |
| 81.5                           | 438                                          | 121                                   | 0.2753         | 0.7247        | 3.59                             |
| 82.5                           | 317                                          | 61                                    | 0.1926         | 0.8074        | 2.60                             |
| 83.5                           | 256                                          | 130                                   | 0.5075         | 0.4925        | 2.10                             |
| 84.5                           | 126                                          | 13                                    | 0.1031         | 0.8969        | 1.03                             |
| 85.5                           | 113                                          |                                       | 0.0000         | 1.0000        | 0.93                             |
| 86.5                           | 113                                          |                                       | 0.0000         | 1.0000        | 0.93                             |
| 87.5                           | 113                                          |                                       | 0.0000         | 1.0000        | 0.93                             |
| 88.5                           | 113                                          |                                       | 0.0000         | 1.0000        | 0.93                             |
| 89.5                           | 113                                          |                                       | 0.0000         | 1.0000        | 0.93                             |
| 90.5                           | 113                                          |                                       | 0.0000         | 1.0000        | 0.93                             |
| 91.5                           | 113                                          |                                       | 0.0000         | 1.0000        | 0.93                             |
| 92.5                           | 113                                          |                                       | 0.0000         | 1.0000        | 0.93                             |
| 93.5                           | 113                                          |                                       | 0.0000         | 1.0000        | 0.93                             |
| 94.5                           | 113                                          |                                       | 0.0000         | 1.0000        | 0.93                             |
| 95.5                           | 113                                          |                                       | 0.0000         | 1.0000        | 0.93                             |
| 96.5                           | 113                                          |                                       | 0.0000         | 1.0000        | 0.93                             |
| 97.5                           | 113                                          |                                       | 0.0000         | 1.0000        | 0.93                             |
| 98.5                           |                                              |                                       |                |               | 0.93                             |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 383 HOUSE REGULATORS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1918-2016

EXPERIENCE BAND 1972-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 0.0                            | 11,192,907                                   | 20                                    | 0.0000         | 1.0000        | 100.00                           |
| 0.5                            | 10,693,240                                   | 14                                    | 0.0000         | 1.0000        | 100.00                           |
| 1.5                            | 10,200,638                                   |                                       | 0.0000         | 1.0000        | 100.00                           |
| 2.5                            | 9,606,417                                    | 2,322                                 | 0.0002         | 0.9998        | 100.00                           |
| 3.5                            | 9,148,387                                    | 852                                   | 0.0001         | 0.9999        | 99.98                            |
| 4.5                            | 8,499,172                                    | 2,886                                 | 0.0003         | 0.9997        | 99.97                            |
| 5.5                            | 7,852,255                                    |                                       | 0.0000         | 1.0000        | 99.93                            |
| 6.5                            | 7,275,037                                    | 148                                   | 0.0000         | 1.0000        | 99.93                            |
| 7.5                            | 6,539,309                                    | 3,835                                 | 0.0006         | 0.9994        | 99.93                            |
| 8.5                            | 6,014,361                                    | 4,610                                 | 0.0008         | 0.9992        | 99.87                            |
| 9.5                            | 5,184,646                                    |                                       | 0.0000         | 1.0000        | 99.80                            |
| 10.5                           | 4,780,294                                    | 1,790                                 | 0.0004         | 0.9996        | 99.80                            |
| 11.5                           | 4,084,925                                    | 6,021                                 | 0.0015         | 0.9985        | 99.76                            |
| 12.5                           | 3,200,220                                    | 1,423                                 | 0.0004         | 0.9996        | 99.61                            |
| 13.5                           | 2,670,866                                    | 756                                   | 0.0003         | 0.9997        | 99.57                            |
| 14.5                           | 2,311,985                                    | 730                                   | 0.0003         | 0.9997        | 99.54                            |
| 15.5                           | 2,264,266                                    | 1,101                                 | 0.0005         | 0.9995        | 99.51                            |
| 16.5                           | 2,103,850                                    | 688                                   | 0.0003         | 0.9997        | 99.46                            |
| 17.5                           | 2,096,357                                    | 769                                   | 0.0004         | 0.9996        | 99.43                            |
| 18.5                           | 2,073,501                                    | 2,744                                 | 0.0013         | 0.9987        | 99.39                            |
| 19.5                           | 1,980,264                                    | 2,333                                 | 0.0012         | 0.9988        | 99.26                            |
| 20.5                           | 1,902,337                                    | 1,569                                 | 0.0008         | 0.9992        | 99.14                            |
| 21.5                           | 1,832,561                                    | 1,245                                 | 0.0007         | 0.9993        | 99.06                            |
| 22.5                           | 1,764,671                                    | 3,551                                 | 0.0020         | 0.9980        | 98.99                            |
| 23.5                           | 1,701,690                                    | 11,980                                | 0.0070         | 0.9930        | 98.79                            |
| 24.5                           | 1,607,302                                    | 65,130                                | 0.0405         | 0.9595        | 98.10                            |
| 25.5                           | 1,465,316                                    | 150,784                               | 0.1029         | 0.8971        | 94.12                            |
| 26.5                           | 1,221,993                                    | 38,274                                | 0.0313         | 0.9687        | 84.44                            |
| 27.5                           | 1,088,310                                    | 17,508                                | 0.0161         | 0.9839        | 81.79                            |
| 28.5                           | 981,692                                      | 24,286                                | 0.0247         | 0.9753        | 80.48                            |
| 29.5                           | 885,347                                      | 17,456                                | 0.0197         | 0.9803        | 78.49                            |
| 30.5                           | 802,318                                      | 21,717                                | 0.0271         | 0.9729        | 76.94                            |
| 31.5                           | 730,353                                      | 19,839                                | 0.0272         | 0.9728        | 74.86                            |
| 32.5                           | 660,640                                      | 16,703                                | 0.0253         | 0.9747        | 72.82                            |
| 33.5                           | 597,847                                      | 13,244                                | 0.0222         | 0.9778        | 70.98                            |
| 34.5                           | 539,653                                      | 12,173                                | 0.0226         | 0.9774        | 69.41                            |
| 35.5                           | 479,969                                      | 10,486                                | 0.0218         | 0.9782        | 67.84                            |
| 36.5                           | 438,571                                      | 3,027                                 | 0.0069         | 0.9931        | 66.36                            |
| 37.5                           | 420,916                                      | 1,718                                 | 0.0041         | 0.9959        | 65.90                            |
| 38.5                           | 412,624                                      | 2,886                                 | 0.0070         | 0.9930        | 65.63                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 383 HOUSE REGULATORS

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1918-2016       |                                              |                                       | EXPERIENCE BAND 1972-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 39.5                           | 405,417                                      | 2,221                                 | 0.0055                    | 0.9945        | 65.17                            |
| 40.5                           | 399,134                                      | 410                                   | 0.0010                    | 0.9990        | 64.82                            |
| 41.5                           | 396,621                                      | 105                                   | 0.0003                    | 0.9997        | 64.75                            |
| 42.5                           | 394,077                                      | 54                                    | 0.0001                    | 0.9999        | 64.73                            |
| 43.5                           | 371,745                                      | 156                                   | 0.0004                    | 0.9996        | 64.73                            |
| 44.5                           | 346,331                                      | 346                                   | 0.0010                    | 0.9990        | 64.70                            |
| 45.5                           | 302,249                                      | 117                                   | 0.0004                    | 0.9996        | 64.63                            |
| 46.5                           | 250,302                                      | 1,016                                 | 0.0041                    | 0.9959        | 64.61                            |
| 47.5                           | 201,521                                      | 109                                   | 0.0005                    | 0.9995        | 64.35                            |
| 48.5                           | 149,249                                      | 97                                    | 0.0006                    | 0.9994        | 64.31                            |
| 49.5                           | 109,452                                      | 70                                    | 0.0006                    | 0.9994        | 64.27                            |
| 50.5                           | 58,461                                       | 87                                    | 0.0015                    | 0.9985        | 64.23                            |
| 51.5                           | 38,261                                       | 178                                   | 0.0047                    | 0.9953        | 64.13                            |
| 52.5                           | 22,010                                       | 203                                   | 0.0092                    | 0.9908        | 63.83                            |
| 53.5                           | 10,587                                       | 71                                    | 0.0067                    | 0.9933        | 63.24                            |
| 54.5                           | 3,416                                        | 62                                    | 0.0182                    | 0.9818        | 62.82                            |
| 55.5                           | 2,428                                        | 177                                   | 0.0730                    | 0.9270        | 61.68                            |
| 56.5                           | 1,896                                        |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 57.5                           | 1,896                                        |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 58.5                           | 1,192                                        |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 59.5                           | 701                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 60.5                           | 701                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 61.5                           | 268                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 62.5                           | 268                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 63.5                           | 268                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 64.5                           | 268                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 65.5                           | 268                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 66.5                           | 268                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 67.5                           | 191                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 68.5                           | 191                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 69.5                           | 191                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 70.5                           | 191                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 71.5                           | 191                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 72.5                           | 191                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 73.5                           | 191                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 74.5                           | 191                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 75.5                           | 191                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 76.5                           | 191                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 77.5                           | 113                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 78.5                           | 113                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |

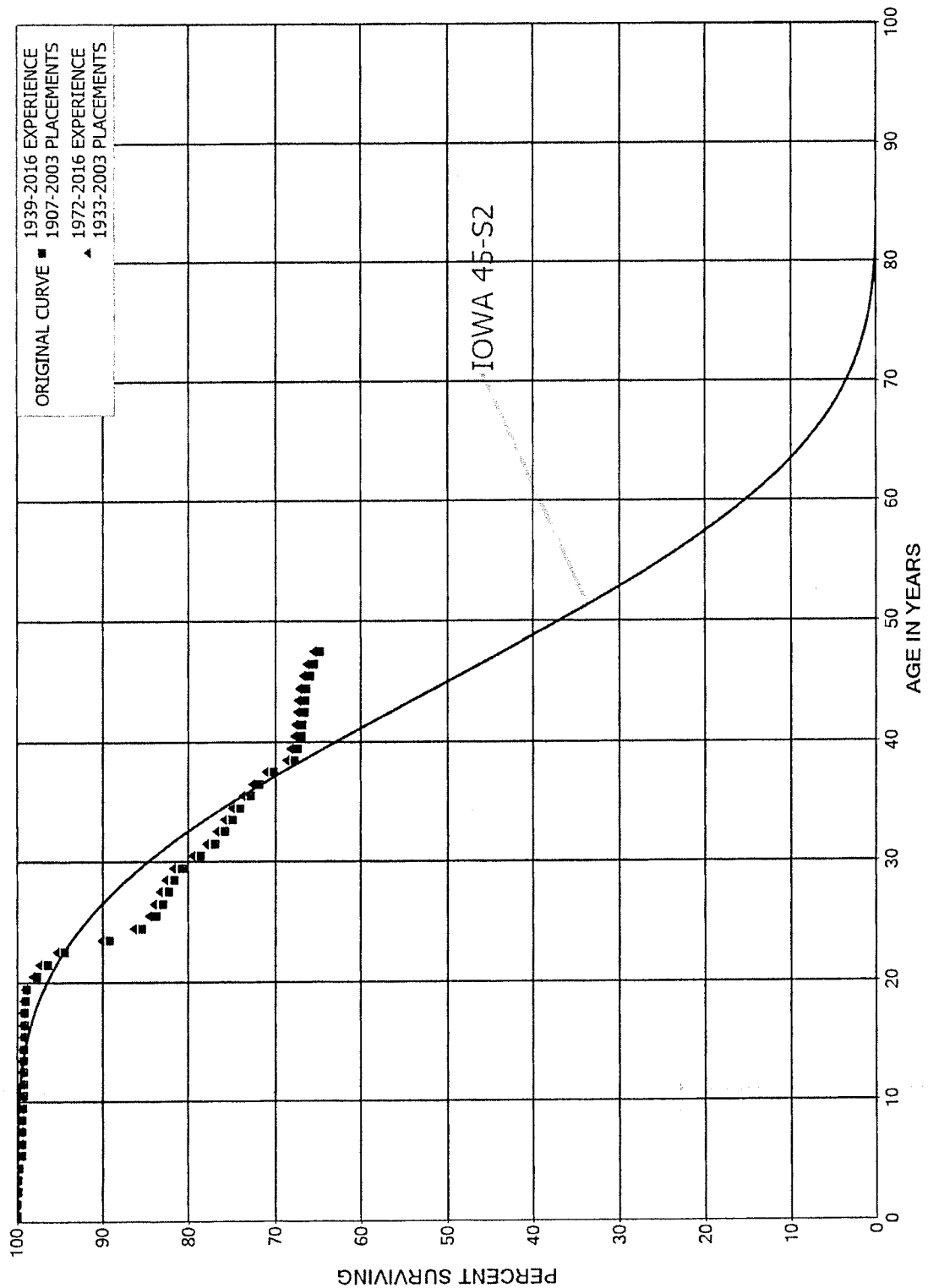
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 383 HOUSE REGULATORS

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1918-2016       |                                              |                                       | EXPERIENCE BAND 1972-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 79.5                           | 113                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 80.5                           | 113                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 81.5                           | 113                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 82.5                           | 113                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 83.5                           | 113                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 84.5                           | 113                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 85.5                           | 113                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 86.5                           | 113                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 87.5                           | 113                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 88.5                           | 113                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 89.5                           | 113                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 90.5                           | 113                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 91.5                           | 113                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 92.5                           | 113                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 93.5                           | 113                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 94.5                           | 113                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 95.5                           | 113                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 96.5                           | 113                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 97.5                           | 113                                          |                                       | 0.0000                    | 1.0000        | 57.18                            |
| 98.5                           |                                              |                                       |                           |               | 57.18                            |

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 1939-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>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                            | 4,454,985                                    | 3,404                                 | 0.0008         | 0.9992        | 99.42                            |
| 9.5                            | 4,462,482                                    | 5,081                                 | 0.0011         | 0.9989        | 99.34                            |
| 10.5                           | 4,466,954                                    | 769                                   | 0.0002         | 0.9998        | 99.23                            |
| 11.5                           | 4,477,223                                    | 1,097                                 | 0.0002         | 0.9998        | 99.21                            |
| 12.5                           | 4,489,085                                    | 1,603                                 | 0.0004         | 0.9996        | 99.19                            |
| 13.5                           | 4,363,205                                    | 1,072                                 | 0.0002         | 0.9998        | 99.15                            |
| 14.5                           | 4,210,487                                    | 520                                   | 0.0001         | 0.9999        | 99.13                            |
| 15.5                           | 3,991,126                                    | 2,611                                 | 0.0007         | 0.9993        | 99.11                            |
| 16.5                           | 3,798,466                                    | 291                                   | 0.0001         | 0.9999        | 99.05                            |
| 17.5                           | 3,663,345                                    | 2,372                                 | 0.0006         | 0.9994        | 99.04                            |
| 18.5                           | 3,485,200                                    | 5,858                                 | 0.0017         | 0.9983        | 98.98                            |
| 19.5                           | 3,299,589                                    | 40,823                                | 0.0124         | 0.9876        | 98.81                            |
| 20.5                           | 3,140,142                                    | 37,362                                | 0.0119         | 0.9881        | 97.59                            |
| 21.5                           | 2,956,918                                    | 60,820                                | 0.0206         | 0.9794        | 96.43                            |
| 22.5                           | 2,713,237                                    | 151,015                               | 0.0557         | 0.9443        | 94.44                            |
| 23.5                           | 2,452,020                                    | 102,760                               | 0.0419         | 0.9581        | 89.19                            |
| 24.5                           | 2,217,075                                    | 45,327                                | 0.0204         | 0.9796        | 85.45                            |
| 25.5                           | 2,036,882                                    | 17,415                                | 0.0085         | 0.9915        | 83.70                            |
| 26.5                           | 1,877,699                                    | 16,156                                | 0.0086         | 0.9914        | 82.99                            |
| 27.5                           | 1,716,695                                    | 13,902                                | 0.0081         | 0.9919        | 82.27                            |
| 28.5                           | 1,531,342                                    | 16,265                                | 0.0106         | 0.9894        | 81.61                            |
| 29.5                           | 1,361,291                                    | 36,168                                | 0.0266         | 0.9734        | 80.74                            |
| 30.5                           | 1,200,301                                    | 24,428                                | 0.0204         | 0.9796        | 78.59                            |
| 31.5                           | 1,059,098                                    | 16,086                                | 0.0152         | 0.9848        | 76.99                            |
| 32.5                           | 942,960                                      | 10,544                                | 0.0112         | 0.9888        | 75.83                            |
| 33.5                           | 838,137                                      | 10,598                                | 0.0126         | 0.9874        | 74.98                            |
| 34.5                           | 715,998                                      | 11,068                                | 0.0155         | 0.9845        | 74.03                            |
| 35.5                           | 601,427                                      | 8,986                                 | 0.0149         | 0.9851        | 72.89                            |
| 36.5                           | 514,210                                      | 11,272                                | 0.0219         | 0.9781        | 71.80                            |
| 37.5                           | 461,239                                      | 16,101                                | 0.0349         | 0.9651        | 70.22                            |
| 38.5                           | 443,858                                      | 2,411                                 | 0.0054         | 0.9946        | 67.77                            |



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 384 HOUSE REGULATOR INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1907-2003

EXPERIENCE BAND 1939-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 39.5                           | 441,422                                      | 3,000                                 | 0.0068         | 0.9932        | 67.40                            |
| 40.5                           | 424,992                                      | 1,004                                 | 0.0024         | 0.9976        | 66.94                            |
| 41.5                           | 398,271                                      | 904                                   | 0.0023         | 0.9977        | 66.79                            |
| 42.5                           | 381,409                                      | 808                                   | 0.0021         | 0.9979        | 66.64                            |
| 43.5                           | 339,314                                      | 758                                   | 0.0022         | 0.9978        | 66.49                            |
| 44.5                           | 307,962                                      | 2,030                                 | 0.0066         | 0.9934        | 66.35                            |
| 45.5                           | 253,601                                      | 1,485                                 | 0.0059         | 0.9941        | 65.91                            |
| 46.5                           | 197,308                                      | 2,210                                 | 0.0112         | 0.9888        | 65.52                            |
| 47.5                           | 157,586                                      | 138                                   | 0.0009         | 0.9991        | 64.79                            |
| 48.5                           | 130,964                                      | 5                                     | 0.0000         | 1.0000        | 64.73                            |
| 49.5                           | 113,853                                      |                                       | 0.0000         | 1.0000        | 64.73                            |
| 50.5                           | 100,548                                      |                                       | 0.0000         | 1.0000        | 64.73                            |
| 51.5                           | 86,075                                       |                                       | 0.0000         | 1.0000        | 64.73                            |
| 52.5                           | 73,054                                       | 10                                    | 0.0001         | 0.9999        | 64.73                            |
| 53.5                           | 63,615                                       | 2,768                                 | 0.0435         | 0.9565        | 64.72                            |
| 54.5                           | 54,511                                       | 6,976                                 | 0.1280         | 0.8720        | 61.90                            |
| 55.5                           | 41,764                                       |                                       | 0.0000         | 1.0000        | 53.98                            |
| 56.5                           | 34,877                                       |                                       | 0.0000         | 1.0000        | 53.98                            |
| 57.5                           | 24,375                                       |                                       | 0.0000         | 1.0000        | 53.98                            |
| 58.5                           | 15,387                                       |                                       | 0.0000         | 1.0000        | 53.98                            |
| 59.5                           | 4,294                                        |                                       | 0.0000         | 1.0000        | 53.98                            |
| 60.5                           | 196                                          |                                       | 0.0000         | 1.0000        | 53.98                            |
| 61.5                           | 196                                          |                                       | 0.0000         | 1.0000        | 53.98                            |
| 62.5                           | 196                                          | 196                                   | 1.0000         |               | 53.98                            |
| 63.5                           |                                              |                                       |                |               |                                  |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 384 HOUSE REGULATOR INSTALLATIONS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1933-2003

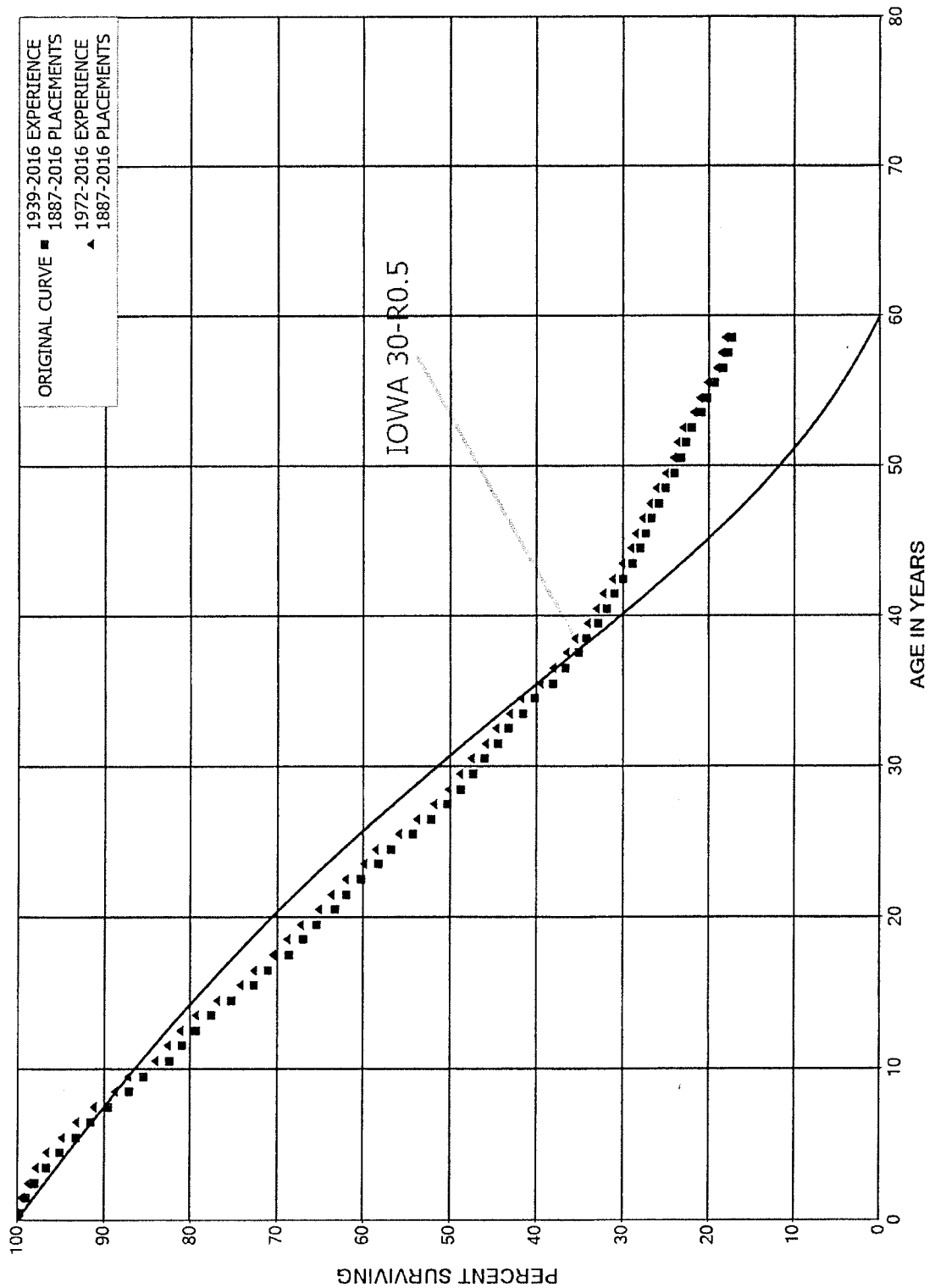
EXPERIENCE BAND 1972-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>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                            | 4,249,464                                    | 1,612                                 | 0.0004         | 0.9996        | 99.46                            |
| 9.5                            | 4,286,175                                    | 1,320                                 | 0.0003         | 0.9997        | 99.42                            |
| 10.5                           | 4,310,604                                    | 418                                   | 0.0001         | 0.9999        | 99.39                            |
| 11.5                           | 4,323,925                                    | 631                                   | 0.0001         | 0.9999        | 99.38                            |
| 12.5                           | 4,346,111                                    | 1,091                                 | 0.0003         | 0.9997        | 99.37                            |
| 13.5                           | 4,230,282                                    | 873                                   | 0.0002         | 0.9998        | 99.34                            |
| 14.5                           | 4,098,738                                    | 394                                   | 0.0001         | 0.9999        | 99.32                            |
| 15.5                           | 3,892,811                                    | 2,569                                 | 0.0007         | 0.9993        | 99.31                            |
| 16.5                           | 3,719,020                                    | 197                                   | 0.0001         | 0.9999        | 99.25                            |
| 17.5                           | 3,592,533                                    | 2,314                                 | 0.0006         | 0.9994        | 99.24                            |
| 18.5                           | 3,429,556                                    | 5,834                                 | 0.0017         | 0.9983        | 99.18                            |
| 19.5                           | 3,251,378                                    | 32,648                                | 0.0100         | 0.9900        | 99.01                            |
| 20.5                           | 3,107,036                                    | 24,335                                | 0.0078         | 0.9922        | 98.01                            |
| 21.5                           | 2,940,482                                    | 58,644                                | 0.0199         | 0.9801        | 97.25                            |
| 22.5                           | 2,700,107                                    | 149,434                               | 0.0553         | 0.9447        | 95.31                            |
| 23.5                           | 2,443,037                                    | 101,997                               | 0.0418         | 0.9582        | 90.03                            |
| 24.5                           | 2,210,194                                    | 44,078                                | 0.0199         | 0.9801        | 86.27                            |
| 25.5                           | 2,032,135                                    | 13,860                                | 0.0068         | 0.9932        | 84.55                            |
| 26.5                           | 1,876,751                                    | 15,780                                | 0.0084         | 0.9916        | 83.98                            |
| 27.5                           | 1,715,943                                    | 13,865                                | 0.0081         | 0.9919        | 83.27                            |
| 28.5                           | 1,526,986                                    | 16,265                                | 0.0107         | 0.9893        | 82.60                            |
| 29.5                           | 1,349,948                                    | 36,160                                | 0.0268         | 0.9732        | 81.72                            |
| 30.5                           | 1,189,402                                    | 24,297                                | 0.0204         | 0.9796        | 79.53                            |
| 31.5                           | 1,052,049                                    | 16,051                                | 0.0153         | 0.9847        | 77.90                            |
| 32.5                           | 942,960                                      | 10,544                                | 0.0112         | 0.9888        | 76.71                            |
| 33.5                           | 838,137                                      | 10,598                                | 0.0126         | 0.9874        | 75.86                            |
| 34.5                           | 715,998                                      | 11,068                                | 0.0155         | 0.9845        | 74.90                            |
| 35.5                           | 601,389                                      | 8,986                                 | 0.0149         | 0.9851        | 73.74                            |
| 36.5                           | 514,172                                      | 11,272                                | 0.0219         | 0.9781        | 72.64                            |
| 37.5                           | 461,151                                      | 16,051                                | 0.0348         | 0.9652        | 71.05                            |
| 38.5                           | 443,833                                      | 2,411                                 | 0.0054         | 0.9946        | 68.57                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
ACCOUNT 384 HOUSE REGULATOR INSTALLATIONS  
ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1933-2003       |                                              |                                       | EXPERIENCE BAND 1972-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 39.5                           | 441,422                                      | 3,000                                 | 0.0068                    | 0.9932        | 68.20                            |
| 40.5                           | 424,992                                      | 1,004                                 | 0.0024                    | 0.9976        | 67.74                            |
| 41.5                           | 398,271                                      | 904                                   | 0.0023                    | 0.9977        | 67.58                            |
| 42.5                           | 381,409                                      | 808                                   | 0.0021                    | 0.9979        | 67.42                            |
| 43.5                           | 339,314                                      | 758                                   | 0.0022                    | 0.9978        | 67.28                            |
| 44.5                           | 307,962                                      | 2,030                                 | 0.0066                    | 0.9934        | 67.13                            |
| 45.5                           | 253,601                                      | 1,485                                 | 0.0059                    | 0.9941        | 66.69                            |
| 46.5                           | 197,249                                      | 2,210                                 | 0.0112                    | 0.9888        | 66.30                            |
| 47.5                           | 157,586                                      | 138                                   | 0.0009                    | 0.9991        | 65.55                            |
| 48.5                           | 130,964                                      | 5                                     | 0.0000                    | 1.0000        | 65.50                            |
| 49.5                           | 113,853                                      |                                       | 0.0000                    | 1.0000        | 65.50                            |
| 50.5                           | 100,548                                      |                                       | 0.0000                    | 1.0000        | 65.50                            |
| 51.5                           | 86,075                                       |                                       | 0.0000                    | 1.0000        | 65.50                            |
| 52.5                           | 73,054                                       | 10                                    | 0.0001                    | 0.9999        | 65.50                            |
| 53.5                           | 63,615                                       | 2,768                                 | 0.0435                    | 0.9565        | 65.49                            |
| 54.5                           | 54,511                                       | 6,976                                 | 0.1280                    | 0.8720        | 62.64                            |
| 55.5                           | 41,764                                       |                                       | 0.0000                    | 1.0000        | 54.62                            |
| 56.5                           | 34,877                                       |                                       | 0.0000                    | 1.0000        | 54.62                            |
| 57.5                           | 24,372                                       |                                       | 0.0000                    | 1.0000        | 54.62                            |
| 58.5                           | 15,387                                       |                                       | 0.0000                    | 1.0000        | 54.62                            |
| 59.5                           | 4,294                                        |                                       | 0.0000                    | 1.0000        | 54.62                            |
| 60.5                           | 196                                          |                                       | 0.0000                    | 1.0000        | 54.62                            |
| 61.5                           | 196                                          |                                       | 0.0000                    | 1.0000        | 54.62                            |
| 62.5                           | 196                                          | 196                                   | 1.0000                    |               | 54.62                            |
| 63.5                           |                                              |                                       |                           |               |                                  |

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



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING EQUIPMENT - OTHER THAN METERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1887-2016

EXPERIENCE BAND 1939-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 0.0                            | 11,539,721                                   | 31,466                                | 0.0027         | 0.9973        | 100.00                           |
| 0.5                            | 10,951,792                                   | 88,562                                | 0.0081         | 0.9919        | 99.73                            |
| 1.5                            | 10,647,615                                   | 108,546                               | 0.0102         | 0.9898        | 98.92                            |
| 2.5                            | 10,407,161                                   | 135,057                               | 0.0130         | 0.9870        | 97.91                            |
| 3.5                            | 10,051,349                                   | 163,044                               | 0.0162         | 0.9838        | 96.64                            |
| 4.5                            | 9,734,012                                    | 188,970                               | 0.0194         | 0.9806        | 95.07                            |
| 5.5                            | 9,406,695                                    | 174,043                               | 0.0185         | 0.9815        | 93.23                            |
| 6.5                            | 9,032,029                                    | 192,703                               | 0.0213         | 0.9787        | 91.50                            |
| 7.5                            | 8,716,446                                    | 240,456                               | 0.0276         | 0.9724        | 89.55                            |
| 8.5                            | 8,266,163                                    | 161,927                               | 0.0196         | 0.9804        | 87.08                            |
| 9.5                            | 7,871,239                                    | 270,251                               | 0.0343         | 0.9657        | 85.38                            |
| 10.5                           | 7,456,708                                    | 139,522                               | 0.0187         | 0.9813        | 82.44                            |
| 11.5                           | 7,267,776                                    | 133,835                               | 0.0184         | 0.9816        | 80.90                            |
| 12.5                           | 7,131,460                                    | 159,286                               | 0.0223         | 0.9777        | 79.41                            |
| 13.5                           | 6,467,641                                    | 196,824                               | 0.0304         | 0.9696        | 77.64                            |
| 14.5                           | 5,982,528                                    | 205,610                               | 0.0344         | 0.9656        | 75.27                            |
| 15.5                           | 5,764,654                                    | 132,131                               | 0.0229         | 0.9771        | 72.69                            |
| 16.5                           | 5,474,368                                    | 186,057                               | 0.0340         | 0.9660        | 71.02                            |
| 17.5                           | 5,232,656                                    | 126,486                               | 0.0242         | 0.9758        | 68.61                            |
| 18.5                           | 4,967,607                                    | 111,646                               | 0.0225         | 0.9775        | 66.95                            |
| 19.5                           | 4,742,396                                    | 152,907                               | 0.0322         | 0.9678        | 65.44                            |
| 20.5                           | 4,406,715                                    | 99,093                                | 0.0225         | 0.9775        | 63.33                            |
| 21.5                           | 4,180,081                                    | 113,126                               | 0.0271         | 0.9729        | 61.91                            |
| 22.5                           | 3,889,726                                    | 129,452                               | 0.0333         | 0.9667        | 60.24                            |
| 23.5                           | 3,643,701                                    | 88,501                                | 0.0243         | 0.9757        | 58.23                            |
| 24.5                           | 3,464,782                                    | 155,685                               | 0.0449         | 0.9551        | 56.82                            |
| 25.5                           | 3,194,520                                    | 123,556                               | 0.0387         | 0.9613        | 54.26                            |
| 26.5                           | 3,002,175                                    | 107,387                               | 0.0358         | 0.9642        | 52.16                            |
| 27.5                           | 2,822,094                                    | 90,290                                | 0.0320         | 0.9680        | 50.30                            |
| 28.5                           | 2,674,650                                    | 77,235                                | 0.0289         | 0.9711        | 48.69                            |
| 29.5                           | 2,581,718                                    | 73,908                                | 0.0286         | 0.9714        | 47.28                            |
| 30.5                           | 2,422,264                                    | 83,678                                | 0.0345         | 0.9655        | 45.93                            |
| 31.5                           | 2,295,703                                    | 62,323                                | 0.0271         | 0.9729        | 44.34                            |
| 32.5                           | 2,201,060                                    | 83,365                                | 0.0379         | 0.9621        | 43.14                            |
| 33.5                           | 2,044,968                                    | 63,799                                | 0.0312         | 0.9688        | 41.51                            |
| 34.5                           | 1,870,907                                    | 99,788                                | 0.0533         | 0.9467        | 40.21                            |
| 35.5                           | 1,655,165                                    | 64,193                                | 0.0388         | 0.9612        | 38.07                            |
| 36.5                           | 1,518,298                                    | 63,568                                | 0.0419         | 0.9581        | 36.59                            |
| 37.5                           | 1,419,287                                    | 36,192                                | 0.0255         | 0.9745        | 35.06                            |
| 38.5                           | 1,371,998                                    | 55,489                                | 0.0404         | 0.9596        | 34.16                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING EQUIPMENT - OTHER THAN METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1887-2016

EXPERIENCE BAND 1939-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 39.5                           | 1,313,906                                    | 39,177                                | 0.0298         | 0.9702        | 32.78                            |
| 40.5                           | 1,273,913                                    | 32,403                                | 0.0254         | 0.9746        | 31.80                            |
| 41.5                           | 1,216,133                                    | 40,247                                | 0.0331         | 0.9669        | 31.00                            |
| 42.5                           | 1,148,879                                    | 44,040                                | 0.0383         | 0.9617        | 29.97                            |
| 43.5                           | 1,059,203                                    | 34,051                                | 0.0321         | 0.9679        | 28.82                            |
| 44.5                           | 938,012                                      | 19,355                                | 0.0206         | 0.9794        | 27.89                            |
| 45.5                           | 810,691                                      | 22,125                                | 0.0273         | 0.9727        | 27.32                            |
| 46.5                           | 737,090                                      | 22,022                                | 0.0299         | 0.9701        | 26.57                            |
| 47.5                           | 661,230                                      | 21,214                                | 0.0321         | 0.9679        | 25.78                            |
| 48.5                           | 586,003                                      | 23,852                                | 0.0407         | 0.9593        | 24.95                            |
| 49.5                           | 501,510                                      | 16,854                                | 0.0336         | 0.9664        | 23.94                            |
| 50.5                           | 456,583                                      | 9,856                                 | 0.0216         | 0.9784        | 23.13                            |
| 51.5                           | 410,821                                      | 11,739                                | 0.0286         | 0.9714        | 22.63                            |
| 52.5                           | 366,807                                      | 19,991                                | 0.0545         | 0.9455        | 21.99                            |
| 53.5                           | 307,945                                      | 8,391                                 | 0.0272         | 0.9728        | 20.79                            |
| 54.5                           | 286,190                                      | 12,884                                | 0.0450         | 0.9550        | 20.22                            |
| 55.5                           | 238,543                                      | 13,002                                | 0.0545         | 0.9455        | 19.31                            |
| 56.5                           | 193,893                                      | 5,762                                 | 0.0297         | 0.9703        | 18.26                            |
| 57.5                           | 164,132                                      | 3,896                                 | 0.0237         | 0.9763        | 17.72                            |
| 58.5                           | 132,527                                      | 4,724                                 | 0.0356         | 0.9644        | 17.30                            |
| 59.5                           | 99,724                                       | 1,717                                 | 0.0172         | 0.9828        | 16.68                            |
| 60.5                           | 75,548                                       | 2,595                                 | 0.0344         | 0.9656        | 16.39                            |
| 61.5                           | 48,326                                       | 1,375                                 | 0.0284         | 0.9716        | 15.83                            |
| 62.5                           | 33,026                                       | 2,071                                 | 0.0627         | 0.9373        | 15.38                            |
| 63.5                           | 26,387                                       |                                       | 0.0000         | 1.0000        | 14.41                            |
| 64.5                           | 22,300                                       | 413                                   | 0.0185         | 0.9815        | 14.41                            |
| 65.5                           | 17,050                                       | 133                                   | 0.0078         | 0.9922        | 14.15                            |
| 66.5                           | 14,957                                       | 141                                   | 0.0095         | 0.9905        | 14.04                            |
| 67.5                           | 14,815                                       |                                       | 0.0000         | 1.0000        | 13.90                            |
| 68.5                           | 13,308                                       |                                       | 0.0000         | 1.0000        | 13.90                            |
| 69.5                           | 12,492                                       | 694                                   | 0.0556         | 0.9444        | 13.90                            |
| 70.5                           | 11,740                                       | 83                                    | 0.0071         | 0.9929        | 13.13                            |
| 71.5                           | 11,035                                       | 488                                   | 0.0442         | 0.9558        | 13.04                            |
| 72.5                           | 9,631                                        | 50                                    | 0.0052         | 0.9948        | 12.46                            |
| 73.5                           | 5,356                                        |                                       | 0.0000         | 1.0000        | 12.40                            |
| 74.5                           | 4,687                                        |                                       | 0.0000         | 1.0000        | 12.40                            |
| 75.5                           | 4,364                                        | 17                                    | 0.0039         | 0.9961        | 12.40                            |
| 76.5                           | 4,347                                        | 86                                    | 0.0199         | 0.9801        | 12.35                            |
| 77.5                           | 3,992                                        | 12                                    | 0.0030         | 0.9970        | 12.10                            |
| 78.5                           | 3,764                                        | 76                                    | 0.0201         | 0.9799        | 12.07                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING EQUIPMENT - OTHER THAN METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1887-2016

EXPERIENCE BAND 1939-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 79.5                           | 2,571                                        |                                       | 0.0000         | 1.0000        | 11.82                            |
| 80.5                           | 2,571                                        | 46                                    | 0.0179         | 0.9821        | 11.82                            |
| 81.5                           | 2,405                                        | 62                                    | 0.0259         | 0.9741        | 11.61                            |
| 82.5                           | 2,331                                        | 99                                    | 0.0427         | 0.9573        | 11.31                            |
| 83.5                           | 1,974                                        | 118                                   | 0.0600         | 0.9400        | 10.83                            |
| 84.5                           | 1,856                                        |                                       | 0.0000         | 1.0000        | 10.18                            |
| 85.5                           | 1,848                                        | 58                                    | 0.0314         | 0.9686        | 10.18                            |
| 86.5                           | 1,014                                        |                                       | 0.0000         | 1.0000        | 9.86                             |
| 87.5                           | 260                                          |                                       | 0.0000         | 1.0000        | 9.86                             |
| 88.5                           | 151                                          |                                       | 0.0000         | 1.0000        | 9.86                             |
| 89.5                           | 151                                          |                                       | 0.0000         | 1.0000        | 9.86                             |
| 90.5                           | 151                                          |                                       | 0.0000         | 1.0000        | 9.86                             |
| 91.5                           | 151                                          | 53                                    | 0.3505         | 0.6495        | 9.86                             |
| 92.5                           | 98                                           |                                       | 0.0000         | 1.0000        | 6.40                             |
| 93.5                           | 98                                           |                                       | 0.0000         | 1.0000        | 6.40                             |
| 94.5                           | 87                                           |                                       | 0.0000         | 1.0000        | 6.40                             |
| 95.5                           | 87                                           |                                       | 0.0000         | 1.0000        | 6.40                             |
| 96.5                           | 87                                           |                                       | 0.0000         | 1.0000        | 6.40                             |
| 97.5                           | 87                                           |                                       | 0.0000         | 1.0000        | 6.40                             |
| 98.5                           | 87                                           |                                       | 0.0000         | 1.0000        | 6.40                             |
| 99.5                           | 87                                           |                                       | 0.0000         | 1.0000        | 6.40                             |
| 100.5                          | 87                                           |                                       | 0.0000         | 1.0000        | 6.40                             |
| 101.5                          | 87                                           |                                       | 0.0000         | 1.0000        | 6.40                             |
| 102.5                          | 87                                           |                                       | 0.0000         | 1.0000        | 6.40                             |
| 103.5                          | 87                                           |                                       | 0.0000         | 1.0000        | 6.40                             |
| 104.5                          | 87                                           |                                       | 0.0000         | 1.0000        | 6.40                             |
| 105.5                          | 87                                           |                                       | 0.0000         | 1.0000        | 6.40                             |
| 106.5                          | 87                                           |                                       | 0.0000         | 1.0000        | 6.40                             |
| 107.5                          | 87                                           |                                       | 0.0000         | 1.0000        | 6.40                             |
| 108.5                          | 87                                           |                                       | 0.0000         | 1.0000        | 6.40                             |
| 109.5                          | 87                                           |                                       | 0.0000         | 1.0000        | 6.40                             |
| 110.5                          | 87                                           |                                       | 0.0000         | 1.0000        | 6.40                             |
| 111.5                          | 87                                           |                                       | 0.0000         | 1.0000        | 6.40                             |
| 112.5                          | 87                                           |                                       | 0.0000         | 1.0000        | 6.40                             |
| 113.5                          | 87                                           |                                       | 0.0000         | 1.0000        | 6.40                             |
| 114.5                          | 63                                           | 15                                    | 0.2412         | 0.7588        | 6.40                             |
| 115.5                          | 48                                           |                                       | 0.0000         | 1.0000        | 4.86                             |
| 116.5                          | 48                                           |                                       | 0.0000         | 1.0000        | 4.86                             |
| 117.5                          | 48                                           |                                       | 0.0000         | 1.0000        | 4.86                             |
| 118.5                          | 48                                           |                                       | 0.0000         | 1.0000        | 4.86                             |



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING EQUIPMENT - OTHER THAN METERS

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1887-2016       |                                              |                                       | EXPERIENCE BAND 1939-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 119.5                          | 48                                           |                                       | 0.0000                    | 1.0000        | 4.86                             |
| 120.5                          | 48                                           |                                       | 0.0000                    | 1.0000        | 4.86                             |
| 121.5                          | 48                                           |                                       | 0.0000                    | 1.0000        | 4.86                             |
| 122.5                          | 48                                           |                                       | 0.0000                    | 1.0000        | 4.86                             |
| 123.5                          | 24                                           |                                       | 0.0000                    | 1.0000        | 4.86                             |
| 124.5                          | 24                                           |                                       | 0.0000                    | 1.0000        | 4.86                             |
| 125.5                          | 24                                           |                                       | 0.0000                    | 1.0000        | 4.86                             |
| 126.5                          |                                              |                                       |                           |               | 4.86                             |



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING EQUIPMENT - OTHER THAN METERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1887-2016

EXPERIENCE BAND 1972-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 0.0                            | 9,181,842                                    | 4,654                                 | 0.0005         | 0.9995        | 100.00                           |
| 0.5                            | 8,972,276                                    | 47,426                                | 0.0053         | 0.9947        | 99.95                            |
| 1.5                            | 8,775,889                                    | 66,950                                | 0.0076         | 0.9924        | 99.42                            |
| 2.5                            | 8,701,319                                    | 80,150                                | 0.0092         | 0.9908        | 98.66                            |
| 3.5                            | 8,483,245                                    | 109,095                               | 0.0129         | 0.9871        | 97.75                            |
| 4.5                            | 8,379,456                                    | 155,834                               | 0.0186         | 0.9814        | 96.50                            |
| 5.5                            | 8,097,018                                    | 141,792                               | 0.0175         | 0.9825        | 94.70                            |
| 6.5                            | 7,801,126                                    | 162,385                               | 0.0208         | 0.9792        | 93.04                            |
| 7.5                            | 7,585,568                                    | 211,191                               | 0.0278         | 0.9722        | 91.11                            |
| 8.5                            | 7,275,060                                    | 121,776                               | 0.0167         | 0.9833        | 88.57                            |
| 9.5                            | 6,945,107                                    | 248,054                               | 0.0357         | 0.9643        | 87.09                            |
| 10.5                           | 6,643,821                                    | 114,067                               | 0.0172         | 0.9828        | 83.98                            |
| 11.5                           | 6,581,746                                    | 116,446                               | 0.0177         | 0.9823        | 82.54                            |
| 12.5                           | 6,538,276                                    | 140,426                               | 0.0215         | 0.9785        | 81.08                            |
| 13.5                           | 5,964,613                                    | 184,332                               | 0.0309         | 0.9691        | 79.33                            |
| 14.5                           | 5,562,785                                    | 193,137                               | 0.0347         | 0.9653        | 76.88                            |
| 15.5                           | 5,427,510                                    | 113,027                               | 0.0208         | 0.9792        | 74.21                            |
| 16.5                           | 5,218,555                                    | 166,544                               | 0.0319         | 0.9681        | 72.67                            |
| 17.5                           | 5,029,225                                    | 117,640                               | 0.0234         | 0.9766        | 70.35                            |
| 18.5                           | 4,789,515                                    | 105,513                               | 0.0220         | 0.9780        | 68.70                            |
| 19.5                           | 4,598,133                                    | 145,145                               | 0.0316         | 0.9684        | 67.19                            |
| 20.5                           | 4,298,876                                    | 96,033                                | 0.0223         | 0.9777        | 65.07                            |
| 21.5                           | 4,089,329                                    | 108,987                               | 0.0267         | 0.9733        | 63.61                            |
| 22.5                           | 3,799,865                                    | 125,827                               | 0.0331         | 0.9669        | 61.92                            |
| 23.5                           | 3,556,990                                    | 80,820                                | 0.0227         | 0.9773        | 59.87                            |
| 24.5                           | 3,388,384                                    | 152,493                               | 0.0450         | 0.9550        | 58.51                            |
| 25.5                           | 3,120,943                                    | 121,734                               | 0.0390         | 0.9610        | 55.88                            |
| 26.5                           | 2,933,071                                    | 104,758                               | 0.0357         | 0.9643        | 53.70                            |
| 27.5                           | 2,758,262                                    | 89,657                                | 0.0325         | 0.9675        | 51.78                            |
| 28.5                           | 2,623,969                                    | 71,818                                | 0.0274         | 0.9726        | 50.10                            |
| 29.5                           | 2,536,993                                    | 69,374                                | 0.0273         | 0.9727        | 48.72                            |
| 30.5                           | 2,383,812                                    | 82,729                                | 0.0347         | 0.9653        | 47.39                            |
| 31.5                           | 2,259,934                                    | 58,742                                | 0.0260         | 0.9740        | 45.75                            |
| 32.5                           | 2,169,367                                    | 77,644                                | 0.0358         | 0.9642        | 44.56                            |
| 33.5                           | 2,024,624                                    | 62,995                                | 0.0311         | 0.9689        | 42.96                            |
| 34.5                           | 1,851,973                                    | 97,784                                | 0.0528         | 0.9472        | 41.63                            |
| 35.5                           | 1,638,945                                    | 61,589                                | 0.0376         | 0.9624        | 39.43                            |
| 36.5                           | 1,507,295                                    | 63,471                                | 0.0421         | 0.9579        | 37.95                            |
| 37.5                           | 1,408,536                                    | 35,066                                | 0.0249         | 0.9751        | 36.35                            |
| 38.5                           | 1,366,451                                    | 55,289                                | 0.0405         | 0.9595        | 35.44                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING EQUIPMENT - OTHER THAN METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1887-2016

EXPERIENCE BAND 1972-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 39.5                           | 1,308,600                                    | 38,938                                | 0.0298         | 0.9702        | 34.01                            |
| 40.5                           | 1,270,672                                    | 32,311                                | 0.0254         | 0.9746        | 33.00                            |
| 41.5                           | 1,214,126                                    | 40,117                                | 0.0330         | 0.9670        | 32.16                            |
| 42.5                           | 1,147,194                                    | 43,975                                | 0.0383         | 0.9617        | 31.10                            |
| 43.5                           | 1,057,939                                    | 33,927                                | 0.0321         | 0.9679        | 29.90                            |
| 44.5                           | 936,960                                      | 19,260                                | 0.0206         | 0.9794        | 28.95                            |
| 45.5                           | 809,762                                      | 22,044                                | 0.0272         | 0.9728        | 28.35                            |
| 46.5                           | 736,314                                      | 22,014                                | 0.0299         | 0.9701        | 27.58                            |
| 47.5                           | 660,429                                      | 21,214                                | 0.0321         | 0.9679        | 26.75                            |
| 48.5                           | 585,194                                      | 23,852                                | 0.0408         | 0.9592        | 25.89                            |
| 49.5                           | 501,357                                      | 16,839                                | 0.0336         | 0.9664        | 24.84                            |
| 50.5                           | 456,444                                      | 9,842                                 | 0.0216         | 0.9784        | 24.00                            |
| 51.5                           | 410,687                                      | 11,730                                | 0.0286         | 0.9714        | 23.49                            |
| 52.5                           | 366,682                                      | 19,991                                | 0.0545         | 0.9455        | 22.82                            |
| 53.5                           | 307,852                                      | 8,352                                 | 0.0271         | 0.9729        | 21.57                            |
| 54.5                           | 286,000                                      | 12,753                                | 0.0446         | 0.9554        | 20.99                            |
| 55.5                           | 238,504                                      | 13,002                                | 0.0545         | 0.9455        | 20.05                            |
| 56.5                           | 193,817                                      | 5,762                                 | 0.0297         | 0.9703        | 18.96                            |
| 57.5                           | 164,059                                      | 3,896                                 | 0.0237         | 0.9763        | 18.39                            |
| 58.5                           | 132,455                                      | 4,719                                 | 0.0356         | 0.9644        | 17.96                            |
| 59.5                           | 99,657                                       | 1,717                                 | 0.0172         | 0.9828        | 17.32                            |
| 60.5                           | 75,480                                       | 2,595                                 | 0.0344         | 0.9656        | 17.02                            |
| 61.5                           | 48,258                                       | 1,375                                 | 0.0285         | 0.9715        | 16.43                            |
| 62.5                           | 32,958                                       | 2,071                                 | 0.0629         | 0.9371        | 15.97                            |
| 63.5                           | 26,296                                       |                                       | 0.0000         | 1.0000        | 14.96                            |
| 64.5                           | 22,208                                       | 413                                   | 0.0186         | 0.9814        | 14.96                            |
| 65.5                           | 16,959                                       | 133                                   | 0.0079         | 0.9921        | 14.68                            |
| 66.5                           | 14,865                                       | 141                                   | 0.0095         | 0.9905        | 14.57                            |
| 67.5                           | 14,724                                       |                                       | 0.0000         | 1.0000        | 14.43                            |
| 68.5                           | 13,216                                       |                                       | 0.0000         | 1.0000        | 14.43                            |
| 69.5                           | 12,449                                       | 694                                   | 0.0558         | 0.9442        | 14.43                            |
| 70.5                           | 11,697                                       | 83                                    | 0.0071         | 0.9929        | 13.63                            |
| 71.5                           | 11,035                                       | 488                                   | 0.0442         | 0.9558        | 13.53                            |
| 72.5                           | 9,583                                        | 50                                    | 0.0052         | 0.9948        | 12.93                            |
| 73.5                           | 5,308                                        |                                       | 0.0000         | 1.0000        | 12.86                            |
| 74.5                           | 4,639                                        |                                       | 0.0000         | 1.0000        | 12.86                            |
| 75.5                           | 4,268                                        | 17                                    | 0.0040         | 0.9960        | 12.86                            |
| 76.5                           | 4,251                                        | 86                                    | 0.0203         | 0.9797        | 12.81                            |
| 77.5                           | 3,896                                        | 12                                    | 0.0031         | 0.9969        | 12.55                            |
| 78.5                           | 3,716                                        | 76                                    | 0.0204         | 0.9796        | 12.51                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING EQUIPMENT - OTHER THAN METERS

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1887-2016       |                                              |                                       | EXPERIENCE BAND 1972-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 79.5                           | 2,523                                        |                                       | 0.0000                    | 1.0000        | 12.26                            |
| 80.5                           | 2,523                                        | 46                                    | 0.0182                    | 0.9818        | 12.26                            |
| 81.5                           | 2,405                                        | 62                                    | 0.0259                    | 0.9741        | 12.03                            |
| 82.5                           | 2,331                                        | 99                                    | 0.0427                    | 0.9573        | 11.72                            |
| 83.5                           | 1,974                                        | 118                                   | 0.0600                    | 0.9400        | 11.22                            |
| 84.5                           | 1,856                                        |                                       | 0.0000                    | 1.0000        | 10.55                            |
| 85.5                           | 1,848                                        | 58                                    | 0.0314                    | 0.9686        | 10.55                            |
| 86.5                           | 1,014                                        |                                       | 0.0000                    | 1.0000        | 10.22                            |
| 87.5                           | 260                                          |                                       | 0.0000                    | 1.0000        | 10.22                            |
| 88.5                           | 151                                          |                                       | 0.0000                    | 1.0000        | 10.22                            |
| 89.5                           | 151                                          |                                       | 0.0000                    | 1.0000        | 10.22                            |
| 90.5                           | 151                                          |                                       | 0.0000                    | 1.0000        | 10.22                            |
| 91.5                           | 151                                          | 53                                    | 0.3505                    | 0.6495        | 10.22                            |
| 92.5                           | 98                                           |                                       | 0.0000                    | 1.0000        | 6.64                             |
| 93.5                           | 98                                           |                                       | 0.0000                    | 1.0000        | 6.64                             |
| 94.5                           | 87                                           |                                       | 0.0000                    | 1.0000        | 6.64                             |
| 95.5                           | 87                                           |                                       | 0.0000                    | 1.0000        | 6.64                             |
| 96.5                           | 87                                           |                                       | 0.0000                    | 1.0000        | 6.64                             |
| 97.5                           | 87                                           |                                       | 0.0000                    | 1.0000        | 6.64                             |
| 98.5                           | 87                                           |                                       | 0.0000                    | 1.0000        | 6.64                             |
| 99.5                           | 87                                           |                                       | 0.0000                    | 1.0000        | 6.64                             |
| 100.5                          | 87                                           |                                       | 0.0000                    | 1.0000        | 6.64                             |
| 101.5                          | 87                                           |                                       | 0.0000                    | 1.0000        | 6.64                             |
| 102.5                          | 87                                           |                                       | 0.0000                    | 1.0000        | 6.64                             |
| 103.5                          | 87                                           |                                       | 0.0000                    | 1.0000        | 6.64                             |
| 104.5                          | 87                                           |                                       | 0.0000                    | 1.0000        | 6.64                             |
| 105.5                          | 87                                           |                                       | 0.0000                    | 1.0000        | 6.64                             |
| 106.5                          | 87                                           |                                       | 0.0000                    | 1.0000        | 6.64                             |
| 107.5                          | 87                                           |                                       | 0.0000                    | 1.0000        | 6.64                             |
| 108.5                          | 87                                           |                                       | 0.0000                    | 1.0000        | 6.64                             |
| 109.5                          | 87                                           |                                       | 0.0000                    | 1.0000        | 6.64                             |
| 110.5                          | 87                                           |                                       | 0.0000                    | 1.0000        | 6.64                             |
| 111.5                          | 87                                           |                                       | 0.0000                    | 1.0000        | 6.64                             |
| 112.5                          | 87                                           |                                       | 0.0000                    | 1.0000        | 6.64                             |
| 113.5                          | 87                                           |                                       | 0.0000                    | 1.0000        | 6.64                             |
| 114.5                          | 63                                           | 15                                    | 0.2412                    | 0.7588        | 6.64                             |
| 115.5                          | 48                                           |                                       | 0.0000                    | 1.0000        | 5.04                             |
| 116.5                          | 48                                           |                                       | 0.0000                    | 1.0000        | 5.04                             |
| 117.5                          | 48                                           |                                       | 0.0000                    | 1.0000        | 5.04                             |
| 118.5                          | 48                                           |                                       | 0.0000                    | 1.0000        | 5.04                             |

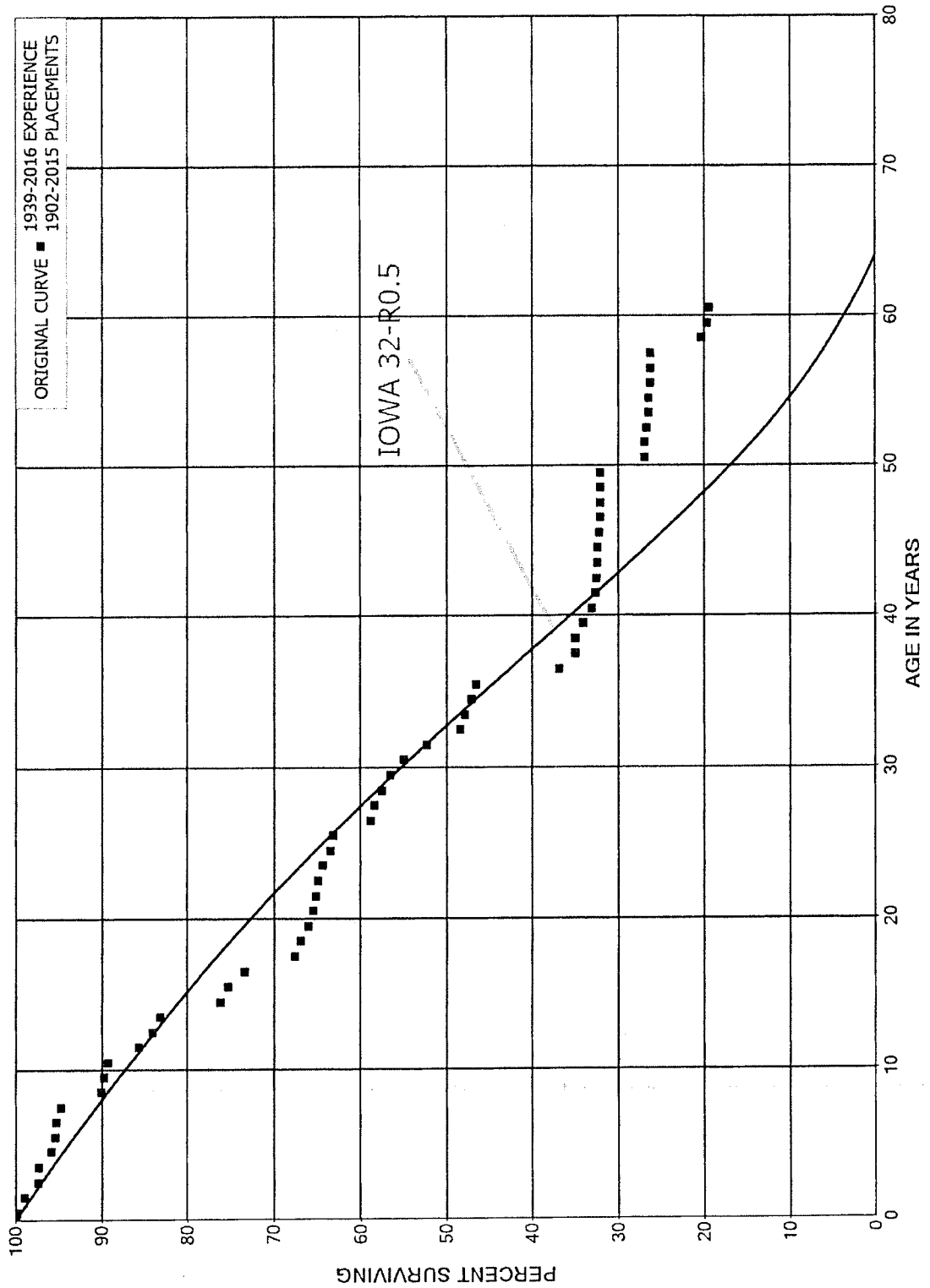
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING EQUIPMENT - OTHER THAN METERS

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1887-2016       |                                              |                                       | EXPERIENCE BAND 1972-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 119.5                          | 48                                           |                                       | 0.0000                    | 1.0000        | 5.04                             |
| 120.5                          | 48                                           |                                       | 0.0000                    | 1.0000        | 5.04                             |
| 121.5                          | 48                                           |                                       | 0.0000                    | 1.0000        | 5.04                             |
| 122.5                          | 48                                           |                                       | 0.0000                    | 1.0000        | 5.04                             |
| 123.5                          | 24                                           |                                       | 0.0000                    | 1.0000        | 5.04                             |
| 124.5                          | 24                                           |                                       | 0.0000                    | 1.0000        | 5.04                             |
| 125.5                          | 24                                           |                                       | 0.0000                    | 1.0000        | 5.04                             |
| 126.5                          |                                              |                                       |                           |               | 5.04                             |

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 1902-2015

EXPERIENCE BAND 1939-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 0.0                            | 314,464                                      | 569                                   | 0.0018         | 0.9982        | 100.00                           |
| 0.5                            | 317,598                                      | 2,879                                 | 0.0091         | 0.9909        | 99.82                            |
| 1.5                            | 324,697                                      | 5,032                                 | 0.0155         | 0.9845        | 98.91                            |
| 2.5                            | 324,094                                      | 434                                   | 0.0013         | 0.9987        | 97.38                            |
| 3.5                            | 323,270                                      | 4,881                                 | 0.0151         | 0.9849        | 97.25                            |
| 4.5                            | 330,508                                      | 1,221                                 | 0.0037         | 0.9963        | 95.78                            |
| 5.5                            | 323,572                                      | 650                                   | 0.0020         | 0.9980        | 95.43                            |
| 6.5                            | 251,252                                      | 1,423                                 | 0.0057         | 0.9943        | 95.24                            |
| 7.5                            | 246,883                                      | 12,163                                | 0.0493         | 0.9507        | 94.70                            |
| 8.5                            | 212,959                                      | 781                                   | 0.0037         | 0.9963        | 90.03                            |
| 9.5                            | 212,258                                      | 1,039                                 | 0.0049         | 0.9951        | 89.70                            |
| 10.5                           | 214,229                                      | 8,483                                 | 0.0396         | 0.9604        | 89.26                            |
| 11.5                           | 206,942                                      | 4,126                                 | 0.0199         | 0.9801        | 85.73                            |
| 12.5                           | 202,673                                      | 1,962                                 | 0.0097         | 0.9903        | 84.02                            |
| 13.5                           | 200,457                                      | 16,985                                | 0.0847         | 0.9153        | 83.21                            |
| 14.5                           | 181,633                                      | 2,175                                 | 0.0120         | 0.9880        | 76.16                            |
| 15.5                           | 177,246                                      | 4,432                                 | 0.0250         | 0.9750        | 75.24                            |
| 16.5                           | 171,486                                      | 13,461                                | 0.0785         | 0.9215        | 73.36                            |
| 17.5                           | 158,072                                      | 1,443                                 | 0.0091         | 0.9909        | 67.60                            |
| 18.5                           | 156,995                                      | 2,189                                 | 0.0139         | 0.9861        | 66.99                            |
| 19.5                           | 154,747                                      | 1,231                                 | 0.0080         | 0.9920        | 66.05                            |
| 20.5                           | 153,516                                      | 851                                   | 0.0055         | 0.9945        | 65.53                            |
| 21.5                           | 151,876                                      | 547                                   | 0.0036         | 0.9964        | 65.16                            |
| 22.5                           | 150,915                                      | 1,225                                 | 0.0081         | 0.9919        | 64.93                            |
| 23.5                           | 150,839                                      | 2,127                                 | 0.0141         | 0.9859        | 64.40                            |
| 24.5                           | 147,381                                      | 776                                   | 0.0053         | 0.9947        | 63.49                            |
| 25.5                           | 146,605                                      | 9,979                                 | 0.0681         | 0.9319        | 63.16                            |
| 26.5                           | 136,860                                      | 1,144                                 | 0.0084         | 0.9916        | 58.86                            |
| 27.5                           | 135,604                                      | 2,124                                 | 0.0157         | 0.9843        | 58.37                            |
| 28.5                           | 133,113                                      | 2,246                                 | 0.0169         | 0.9831        | 57.46                            |
| 29.5                           | 130,400                                      | 3,591                                 | 0.0275         | 0.9725        | 56.49                            |
| 30.5                           | 126,829                                      | 6,112                                 | 0.0482         | 0.9518        | 54.93                            |
| 31.5                           | 106,161                                      | 7,792                                 | 0.0734         | 0.9266        | 52.28                            |
| 32.5                           | 98,166                                       | 1,184                                 | 0.0121         | 0.9879        | 48.45                            |
| 33.5                           | 95,276                                       | 1,534                                 | 0.0161         | 0.9839        | 47.86                            |
| 34.5                           | 87,060                                       | 1,062                                 | 0.0122         | 0.9878        | 47.09                            |
| 35.5                           | 72,254                                       | 15,093                                | 0.2089         | 0.7911        | 46.52                            |
| 36.5                           | 57,165                                       | 2,780                                 | 0.0486         | 0.9514        | 36.80                            |
| 37.5                           | 54,295                                       | 33                                    | 0.0006         | 0.9994        | 35.01                            |
| 38.5                           | 54,235                                       | 1,517                                 | 0.0280         | 0.9720        | 34.99                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 387 OTHER EQUIPMENT - GENERAL

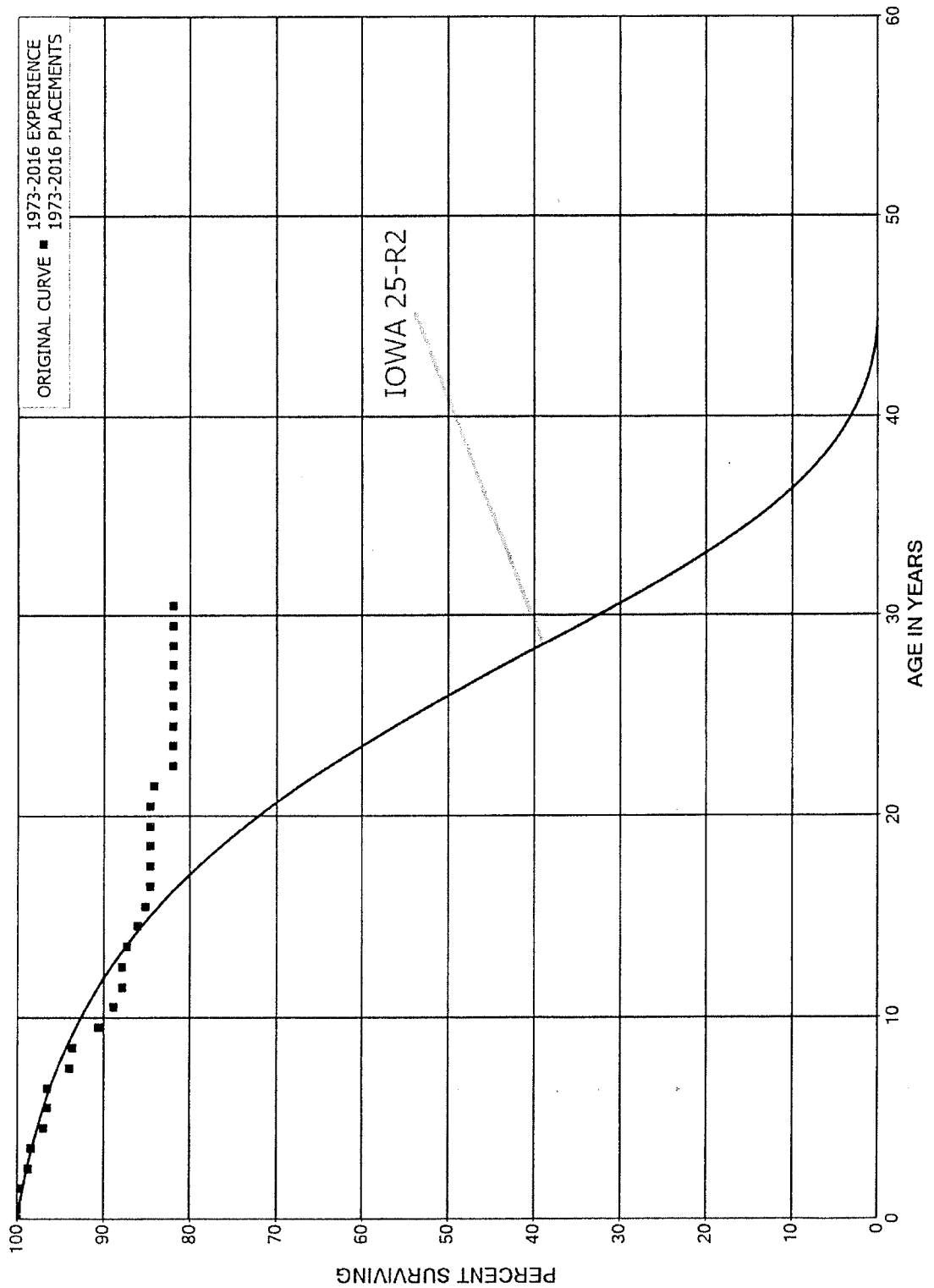
ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1902-2015

EXPERIENCE BAND 1939-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 39.5                           | 52,719                                       | 1,505                                 | 0.0285         | 0.9715        | 34.01                            |
| 40.5                           | 51,214                                       | 676                                   | 0.0132         | 0.9868        | 33.04                            |
| 41.5                           | 50,538                                       | 217                                   | 0.0043         | 0.9957        | 32.60                            |
| 42.5                           | 50,302                                       | 99                                    | 0.0020         | 0.9980        | 32.46                            |
| 43.5                           | 50,092                                       | 64                                    | 0.0013         | 0.9987        | 32.40                            |
| 44.5                           | 42,118                                       | 263                                   | 0.0062         | 0.9938        | 32.36                            |
| 45.5                           | 41,247                                       | 67                                    | 0.0016         | 0.9984        | 32.16                            |
| 46.5                           | 41,181                                       | 82                                    | 0.0020         | 0.9980        | 32.10                            |
| 47.5                           | 41,099                                       |                                       | 0.0000         | 1.0000        | 32.04                            |
| 48.5                           | 41,099                                       |                                       | 0.0000         | 1.0000        | 32.04                            |
| 49.5                           | 40,647                                       | 6,669                                 | 0.1641         | 0.8359        | 32.04                            |
| 50.5                           | 33,978                                       |                                       | 0.0000         | 1.0000        | 26.78                            |
| 51.5                           | 33,978                                       | 263                                   | 0.0077         | 0.9923        | 26.78                            |
| 52.5                           | 33,715                                       | 263                                   | 0.0078         | 0.9922        | 26.58                            |
| 53.5                           | 33,372                                       |                                       | 0.0000         | 1.0000        | 26.37                            |
| 54.5                           | 25,746                                       | 166                                   | 0.0065         | 0.9935        | 26.37                            |
| 55.5                           | 25,580                                       |                                       | 0.0000         | 1.0000        | 26.20                            |
| 56.5                           | 25,580                                       |                                       | 0.0000         | 1.0000        | 26.20                            |
| 57.5                           | 25,391                                       | 5,748                                 | 0.2264         | 0.7736        | 26.20                            |
| 58.5                           | 19,643                                       | 645                                   | 0.0329         | 0.9671        | 20.27                            |
| 59.5                           | 4,623                                        | 40                                    | 0.0087         | 0.9913        | 19.60                            |
| 60.5                           | 4,583                                        |                                       | 0.0000         | 1.0000        | 19.43                            |
| 61.5                           | 295                                          | 11                                    | 0.0369         | 0.9631        | 19.43                            |
| 62.5                           | 284                                          |                                       | 0.0000         | 1.0000        | 18.72                            |
| 63.5                           | 284                                          |                                       | 0.0000         | 1.0000        | 18.72                            |
| 64.5                           | 284                                          | 5                                     | 0.0158         | 0.9842        | 18.72                            |
| 65.5                           | 280                                          |                                       | 0.0000         | 1.0000        | 18.42                            |
| 66.5                           | 190                                          | 2                                     | 0.0106         | 0.9894        | 18.42                            |
| 67.5                           | 188                                          | 12                                    | 0.0617         | 0.9383        | 18.22                            |
| 68.5                           | 176                                          |                                       | 0.0000         | 1.0000        | 17.10                            |
| 69.5                           | 106                                          |                                       | 0.0000         | 1.0000        | 17.10                            |
| 70.5                           | 106                                          |                                       | 0.0000         | 1.0000        | 17.10                            |
| 71.5                           | 106                                          |                                       | 0.0000         | 1.0000        | 17.10                            |
| 72.5                           | 106                                          |                                       | 0.0000         | 1.0000        | 17.10                            |
| 73.5                           | 106                                          |                                       | 0.0000         | 1.0000        | 17.10                            |
| 74.5                           | 38                                           |                                       | 0.0000         | 1.0000        | 17.10                            |
| 75.5                           |                                              |                                       |                |               | 17.10                            |

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





COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 387.4 OTHER EQUIPMENT - COMMUNICATION EQUIPMENT

ORIGINAL LIFE TABLE

| PLACEMENT BAND 1973-2016       |                                              |                                       | EXPERIENCE BAND 1973-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 0.0                            | 8,732,986                                    |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 0.5                            | 6,377,954                                    | 15,389                                | 0.0024                    | 0.9976        | 100.00                           |
| 1.5                            | 4,140,818                                    | 43,538                                | 0.0105                    | 0.9895        | 99.76                            |
| 2.5                            | 2,076,627                                    | 6,294                                 | 0.0030                    | 0.9970        | 98.71                            |
| 3.5                            | 1,309,164                                    | 19,945                                | 0.0152                    | 0.9848        | 98.41                            |
| 4.5                            | 1,126,022                                    | 5,100                                 | 0.0045                    | 0.9955        | 96.91                            |
| 5.5                            | 1,070,447                                    |                                       | 0.0000                    | 1.0000        | 96.47                            |
| 6.5                            | 946,961                                      | 25,259                                | 0.0267                    | 0.9733        | 96.47                            |
| 7.5                            | 915,870                                      | 2,721                                 | 0.0030                    | 0.9970        | 93.90                            |
| 8.5                            | 913,148                                      | 29,014                                | 0.0318                    | 0.9682        | 93.62                            |
| 9.5                            | 874,197                                      | 17,977                                | 0.0206                    | 0.9794        | 90.65                            |
| 10.5                           | 838,949                                      | 8,448                                 | 0.0101                    | 0.9899        | 88.78                            |
| 11.5                           | 592,108                                      |                                       | 0.0000                    | 1.0000        | 87.89                            |
| 12.5                           | 472,532                                      | 3,511                                 | 0.0074                    | 0.9926        | 87.89                            |
| 13.5                           | 466,695                                      | 6,349                                 | 0.0136                    | 0.9864        | 87.23                            |
| 14.5                           | 460,346                                      | 4,937                                 | 0.0107                    | 0.9893        | 86.05                            |
| 15.5                           | 312,941                                      | 1,836                                 | 0.0059                    | 0.9941        | 85.12                            |
| 16.5                           | 260,926                                      |                                       | 0.0000                    | 1.0000        | 84.63                            |
| 17.5                           | 260,926                                      |                                       | 0.0000                    | 1.0000        | 84.63                            |
| 18.5                           | 260,926                                      |                                       | 0.0000                    | 1.0000        | 84.63                            |
| 19.5                           | 260,926                                      |                                       | 0.0000                    | 1.0000        | 84.63                            |
| 20.5                           | 260,926                                      | 1,490                                 | 0.0057                    | 0.9943        | 84.63                            |
| 21.5                           | 259,436                                      | 6,651                                 | 0.0256                    | 0.9744        | 84.14                            |
| 22.5                           | 248,703                                      |                                       | 0.0000                    | 1.0000        | 81.98                            |
| 23.5                           | 246,985                                      |                                       | 0.0000                    | 1.0000        | 81.98                            |
| 24.5                           | 240,475                                      |                                       | 0.0000                    | 1.0000        | 81.98                            |
| 25.5                           | 208,880                                      |                                       | 0.0000                    | 1.0000        | 81.98                            |
| 26.5                           | 170,927                                      |                                       | 0.0000                    | 1.0000        | 81.98                            |
| 27.5                           | 167,501                                      |                                       | 0.0000                    | 1.0000        | 81.98                            |
| 28.5                           | 167,501                                      |                                       | 0.0000                    | 1.0000        | 81.98                            |
| 29.5                           | 127,496                                      |                                       | 0.0000                    | 1.0000        | 81.98                            |
| 30.5                           | 65,900                                       |                                       | 0.0000                    | 1.0000        | 81.98                            |
| 31.5                           | 38,547                                       |                                       | 0.0000                    | 1.0000        | 81.98                            |
| 32.5                           | 33,816                                       |                                       | 0.0000                    | 1.0000        | 81.98                            |
| 33.5                           | 23,121                                       |                                       | 0.0000                    | 1.0000        | 81.98                            |
| 34.5                           | 23,121                                       |                                       | 0.0000                    | 1.0000        | 81.98                            |
| 35.5                           | 23,121                                       |                                       | 0.0000                    | 1.0000        | 81.98                            |
| 36.5                           | 21,976                                       |                                       | 0.0000                    | 1.0000        | 81.98                            |
| 37.5                           | 21,976                                       |                                       | 0.0000                    | 1.0000        | 81.98                            |
| 38.5                           | 21,976                                       |                                       | 0.0000                    | 1.0000        | 81.98                            |

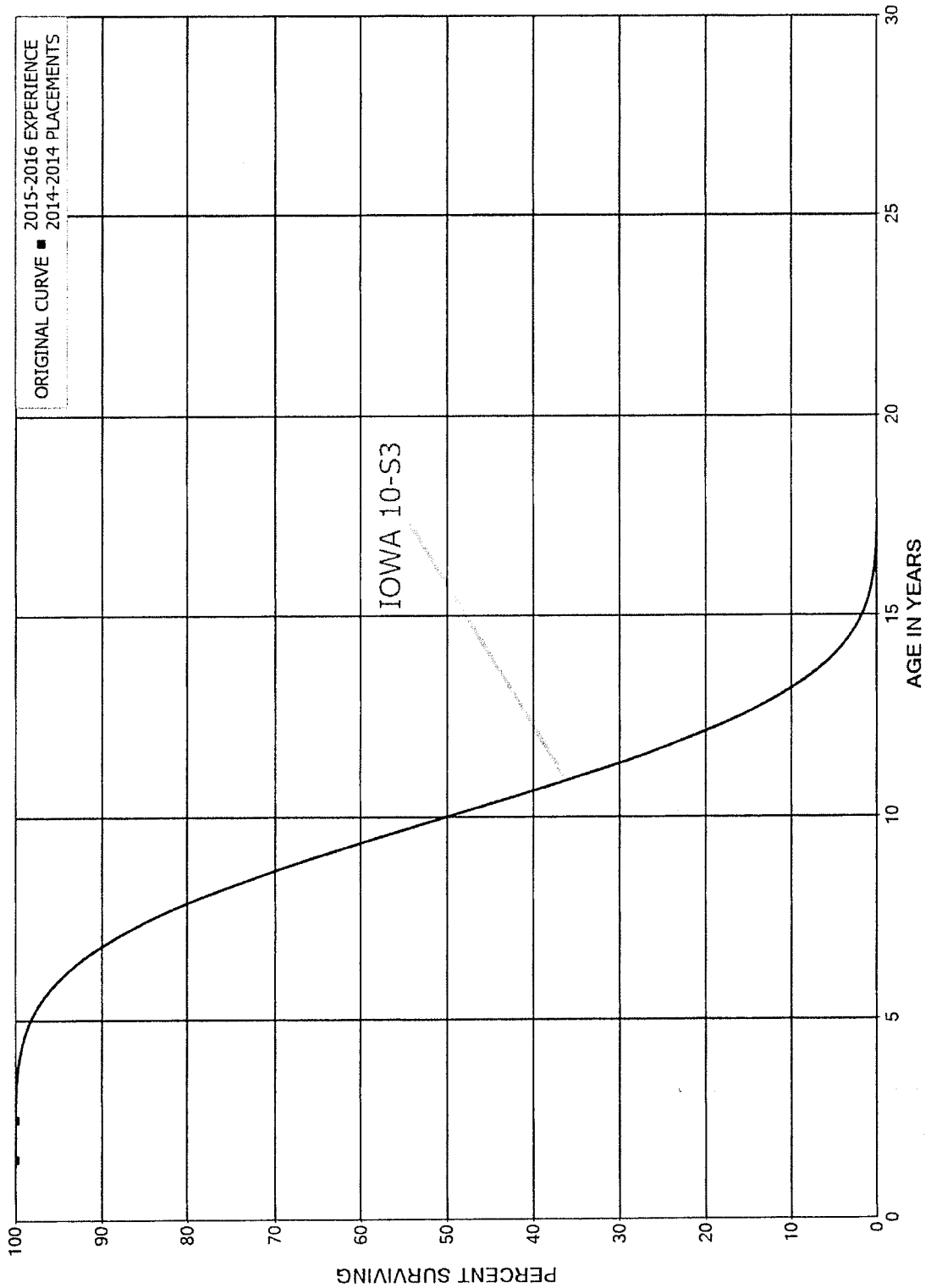
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 387.4 OTHER EQUIPMENT - COMMUNICATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1973-2016       |                                              |                                       | EXPERIENCE BAND 1973-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 39.5                           | 21,976                                       |                                       | 0.0000                    | 1.0000        | 81.98                            |
| 40.5                           | 15,667                                       |                                       | 0.0000                    | 1.0000        | 81.98                            |
| 41.5                           | 12,478                                       |                                       | 0.0000                    | 1.0000        | 81.98                            |
| 42.5                           | 917                                          |                                       | 0.0000                    | 1.0000        | 81.98                            |
| 43.5                           |                                              |                                       |                           |               | 81.98                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
 ACCOUNT 387.5 OTHER EQUIPMENT - GPS  
 ORIGINAL AND SMOOTH SURVIVOR CURVES



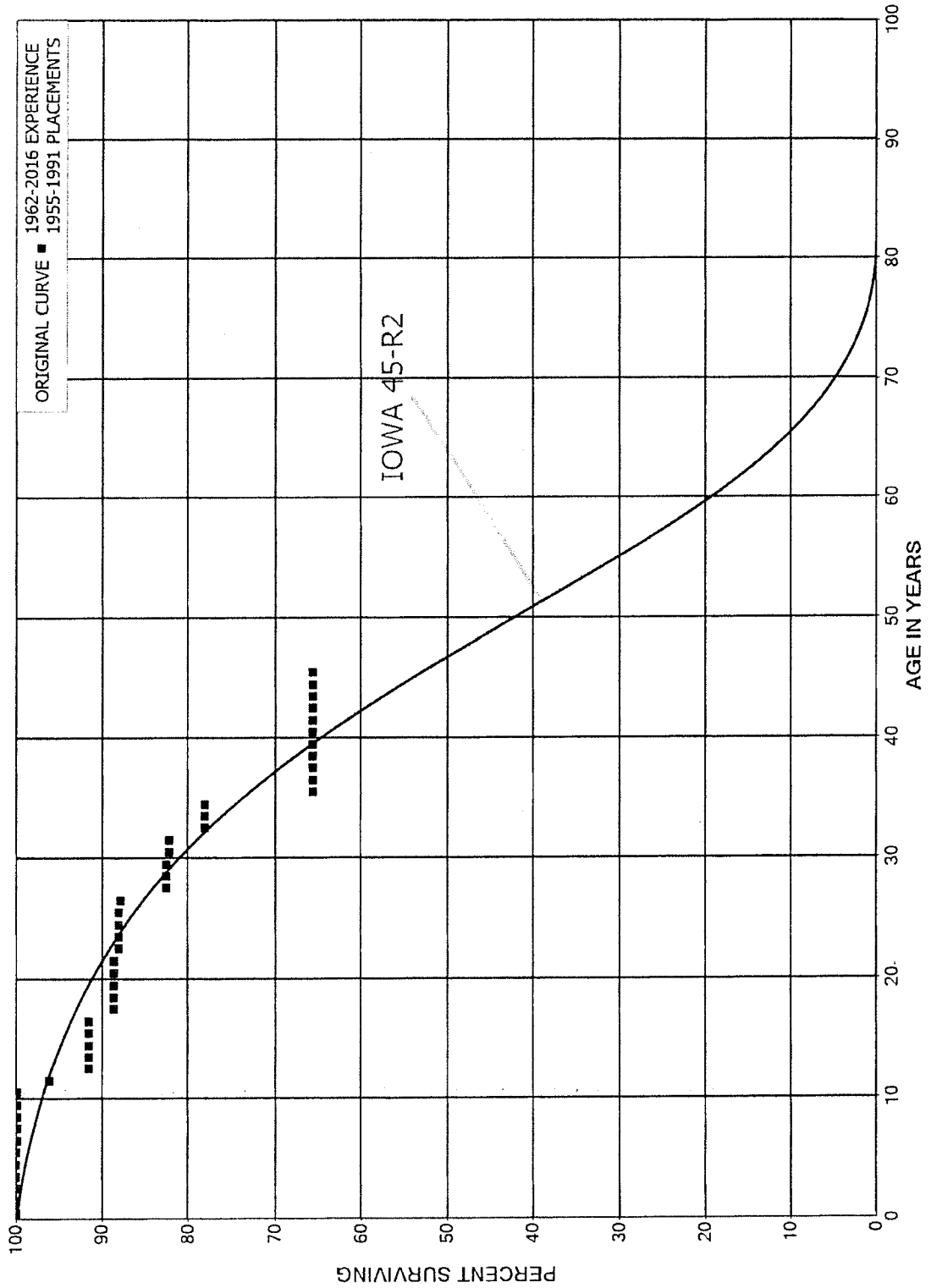
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 387.5 OTHER EQUIPMENT - GPS

ORIGINAL LIFE TABLE

| PLACEMENT BAND 2014-2014       |                                              |                                       | EXPERIENCE BAND 2015-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 0.0                            |                                              |                                       |                           |               |                                  |
| 0.5                            |                                              |                                       |                           |               |                                  |
| 1.5                            | 2,053,366                                    |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 2.5                            |                                              |                                       |                           |               | 100.00                           |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
ACCOUNT 390.1 STRUCTURES AND IMPROVEMENTS - COMMUNICATION  
ORIGINAL AND SMOOTH SURVIVOR CURVES



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 390.1 STRUCTURES AND IMPROVEMENTS - COMMUNICATION

ORIGINAL LIFE TABLE

| PLACEMENT BAND 1955-1991       |                                              |                                       | EXPERIENCE BAND 1962-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>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                           | 60,802                                       | 368                                   | 0.0060                    | 0.9940        | 88.60                            |
| 22.5                           | 60,434                                       |                                       | 0.0000                    | 1.0000        | 88.07                            |
| 23.5                           | 76,736                                       |                                       | 0.0000                    | 1.0000        | 88.07                            |
| 24.5                           | 121,259                                      |                                       | 0.0000                    | 1.0000        | 88.07                            |
| 25.5                           | 114,381                                      | 257                                   | 0.0022                    | 0.9978        | 88.07                            |
| 26.5                           | 68,781                                       | 4,164                                 | 0.0605                    | 0.9395        | 87.87                            |
| 27.5                           | 55,193                                       |                                       | 0.0000                    | 1.0000        | 82.55                            |
| 28.5                           | 45,764                                       |                                       | 0.0000                    | 1.0000        | 82.55                            |
| 29.5                           | 38,977                                       | 189                                   | 0.0048                    | 0.9952        | 82.55                            |
| 30.5                           | 38,788                                       |                                       | 0.0000                    | 1.0000        | 82.15                            |
| 31.5                           | 38,788                                       | 1,918                                 | 0.0495                    | 0.9505        | 82.15                            |
| 32.5                           | 33,420                                       |                                       | 0.0000                    | 1.0000        | 78.09                            |
| 33.5                           | 25,548                                       |                                       | 0.0000                    | 1.0000        | 78.09                            |
| 34.5                           | 25,548                                       | 4,084                                 | 0.1599                    | 0.8401        | 78.09                            |
| 35.5                           | 21,464                                       |                                       | 0.0000                    | 1.0000        | 65.60                            |
| 36.5                           | 21,464                                       |                                       | 0.0000                    | 1.0000        | 65.60                            |
| 37.5                           | 21,464                                       |                                       | 0.0000                    | 1.0000        | 65.60                            |
| 38.5                           | 21,464                                       |                                       | 0.0000                    | 1.0000        | 65.60                            |

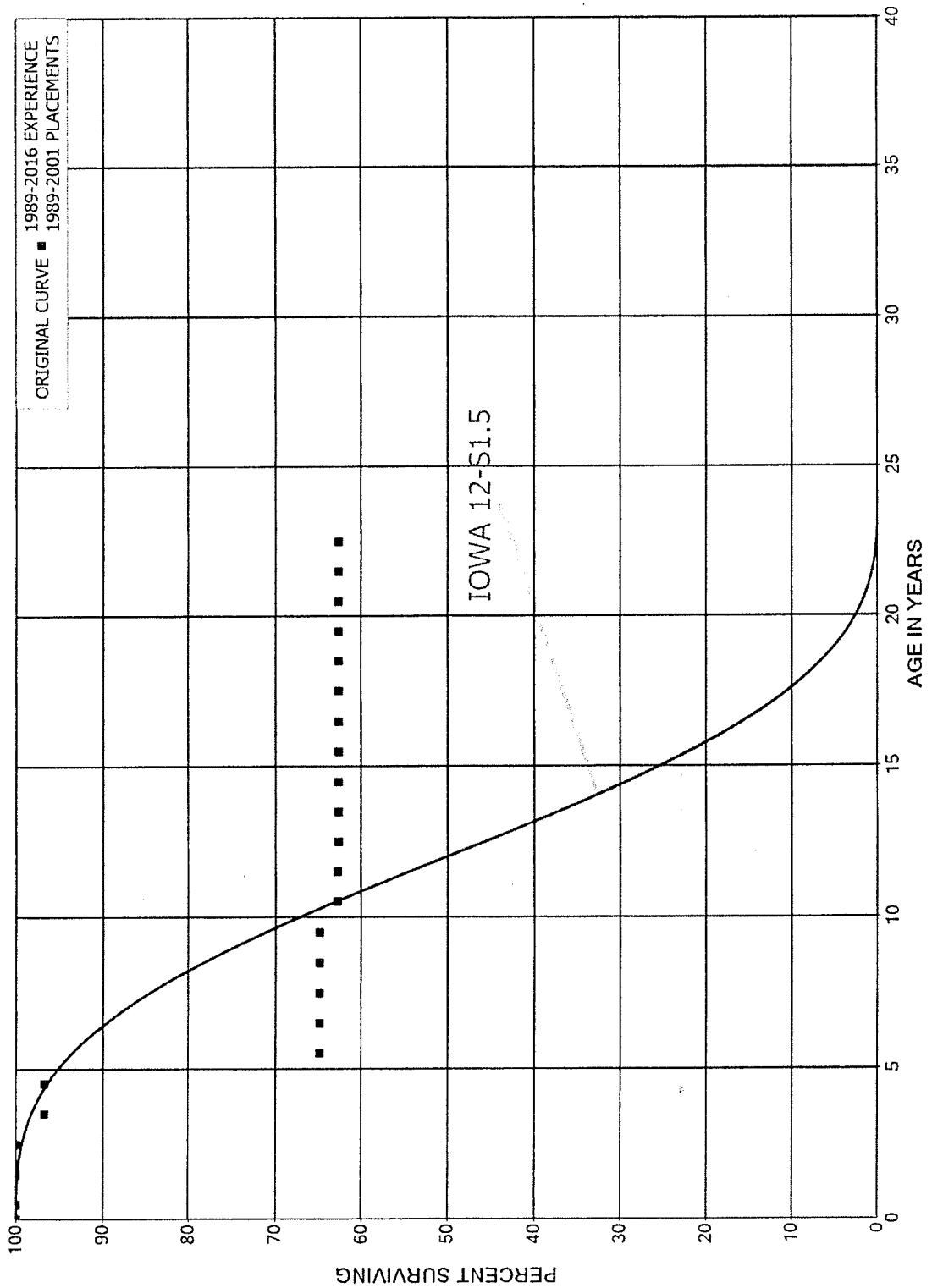
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 390.1 STRUCTURES AND IMPROVEMENTS - COMMUNICATION

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1955-1991       |                                              |                                       | EXPERIENCE BAND 1962-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 39.5                           | 21,464                                       |                                       | 0.0000                    | 1.0000        | 65.60                            |
| 40.5                           | 21,464                                       |                                       | 0.0000                    | 1.0000        | 65.60                            |
| 41.5                           | 21,464                                       |                                       | 0.0000                    | 1.0000        | 65.60                            |
| 42.5                           | 21,464                                       |                                       | 0.0000                    | 1.0000        | 65.60                            |
| 43.5                           | 21,464                                       |                                       | 0.0000                    | 1.0000        | 65.60                            |
| 44.5                           | 21,464                                       |                                       | 0.0000                    | 1.0000        | 65.60                            |
| 45.5                           | 3,493                                        |                                       | 0.0000                    | 1.0000        | 65.60                            |
| 46.5                           | 3,493                                        |                                       | 0.0000                    | 1.0000        | 65.60                            |
| 47.5                           | 3,493                                        |                                       | 0.0000                    | 1.0000        | 65.60                            |
| 48.5                           | 3,493                                        |                                       | 0.0000                    | 1.0000        | 65.60                            |
| 49.5                           | 3,493                                        |                                       | 0.0000                    | 1.0000        | 65.60                            |
| 50.5                           | 3,493                                        |                                       | 0.0000                    | 1.0000        | 65.60                            |
| 51.5                           | 3,493                                        |                                       | 0.0000                    | 1.0000        | 65.60                            |
| 52.5                           | 3,493                                        |                                       | 0.0000                    | 1.0000        | 65.60                            |
| 53.5                           | 3,493                                        |                                       | 0.0000                    | 1.0000        | 65.60                            |
| 54.5                           | 3,493                                        |                                       | 0.0000                    | 1.0000        | 65.60                            |
| 55.5                           | 3,493                                        |                                       | 0.0000                    | 1.0000        | 65.60                            |
| 56.5                           | 3,493                                        |                                       | 0.0000                    | 1.0000        | 65.60                            |
| 57.5                           | 1,363                                        |                                       | 0.0000                    | 1.0000        | 65.60                            |
| 58.5                           | 1,171                                        |                                       | 0.0000                    | 1.0000        | 65.60                            |
| 59.5                           | 1,171                                        |                                       | 0.0000                    | 1.0000        | 65.60                            |
| 60.5                           | 1,171                                        |                                       | 0.0000                    | 1.0000        | 65.60                            |
| 61.5                           |                                              |                                       |                           |               | 65.60                            |

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

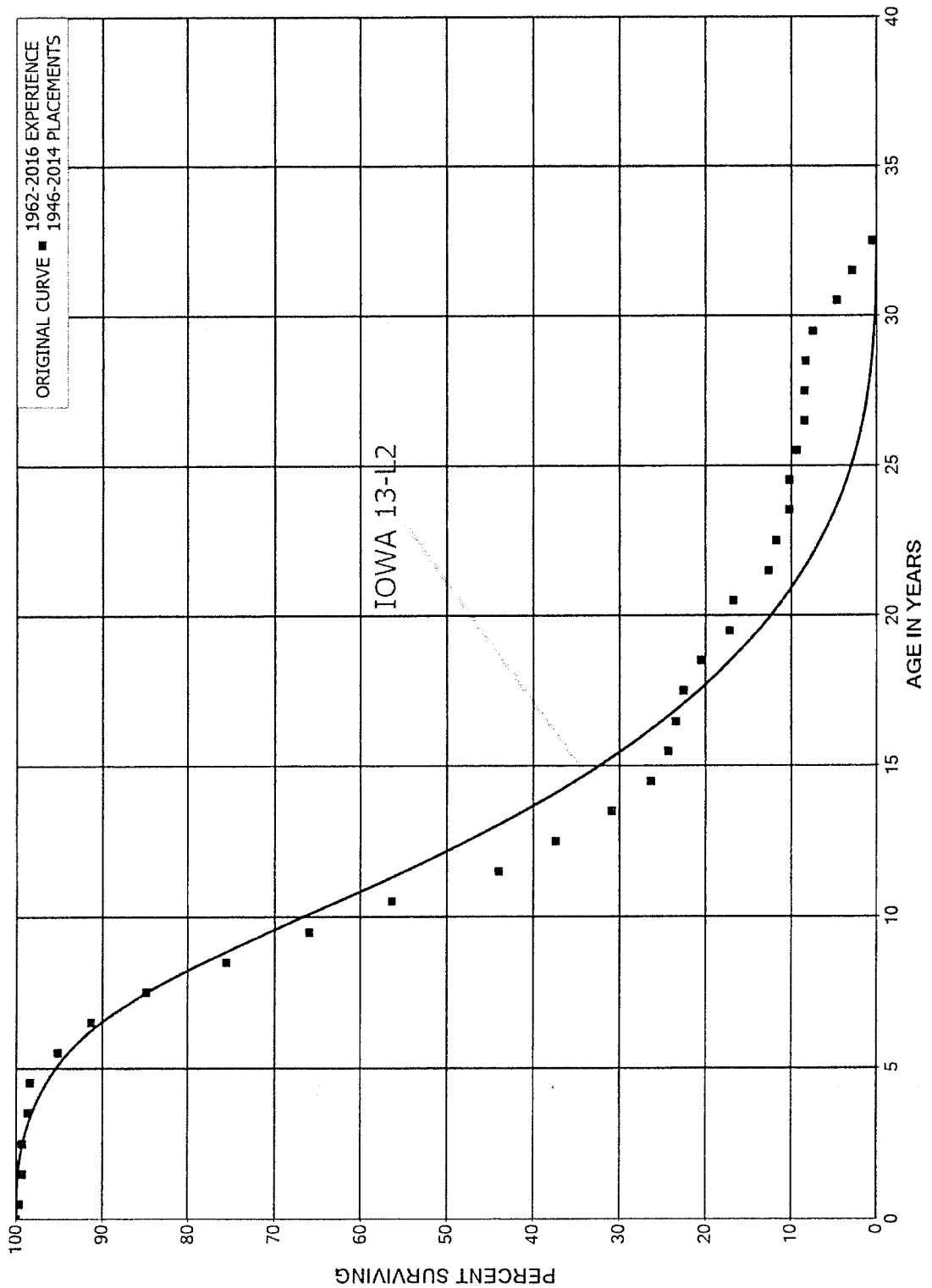
ORIGINAL LIFE TABLE

PLACEMENT BAND 1989-2001

EXPERIENCE BAND 1989-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>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                           | 1,958,967                                    |                                       | 0.0000         | 1.0000        | 62.75                            |
| 11.5                           | 1,958,967                                    | 4,406                                 | 0.0022         | 0.9978        | 62.75                            |
| 12.5                           | 1,954,561                                    | 1,064                                 | 0.0005         | 0.9995        | 62.61                            |
| 13.5                           | 1,953,498                                    |                                       | 0.0000         | 1.0000        | 62.58                            |
| 14.5                           | 1,953,498                                    |                                       | 0.0000         | 1.0000        | 62.58                            |
| 15.5                           | 1,872,751                                    |                                       | 0.0000         | 1.0000        | 62.58                            |
| 16.5                           | 1,872,751                                    |                                       | 0.0000         | 1.0000        | 62.58                            |
| 17.5                           | 1,854,301                                    |                                       | 0.0000         | 1.0000        | 62.58                            |
| 18.5                           | 1,755,899                                    |                                       | 0.0000         | 1.0000        | 62.58                            |
| 19.5                           | 1,755,899                                    |                                       | 0.0000         | 1.0000        | 62.58                            |
| 20.5                           | 1,475,807                                    |                                       | 0.0000         | 1.0000        | 62.58                            |
| 21.5                           | 340,339                                      |                                       | 0.0000         | 1.0000        | 62.58                            |
| 22.5                           | 222,411                                      |                                       | 0.0000         | 1.0000        | 62.58                            |
| 23.5                           | 126,466                                      |                                       | 0.0000         | 1.0000        | 62.58                            |
| 24.5                           | 126,466                                      |                                       | 0.0000         | 1.0000        | 62.58                            |
| 25.5                           | 101,772                                      |                                       | 0.0000         | 1.0000        | 62.58                            |
| 26.5                           | 99,674                                       |                                       | 0.0000         | 1.0000        | 62.58                            |
| 27.5                           |                                              |                                       |                |               | 62.58                            |

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 1946-2014       |                                              |                                       | EXPERIENCE BAND 1962-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 0.0                            | 4,058,725                                    | 15,475                                | 0.0038                    | 0.9962        | 100.00                           |
| 0.5                            | 4,145,425                                    | 14,936                                | 0.0036                    | 0.9964        | 99.62                            |
| 1.5                            | 4,341,921                                    |                                       | 0.0000                    | 1.0000        | 99.26                            |
| 2.5                            | 4,513,824                                    | 31,755                                | 0.0070                    | 0.9930        | 99.26                            |
| 3.5                            | 4,796,247                                    | 10,314                                | 0.0022                    | 0.9978        | 98.56                            |
| 4.5                            | 4,920,739                                    | 157,094                               | 0.0319                    | 0.9681        | 98.35                            |
| 5.5                            | 4,964,891                                    | 206,581                               | 0.0416                    | 0.9584        | 95.21                            |
| 6.5                            | 5,028,890                                    | 354,400                               | 0.0705                    | 0.9295        | 91.25                            |
| 7.5                            | 4,888,754                                    | 529,216                               | 0.1083                    | 0.8917        | 84.82                            |
| 8.5                            | 4,511,032                                    | 580,245                               | 0.1286                    | 0.8714        | 75.64                            |
| 9.5                            | 3,995,669                                    | 575,507                               | 0.1440                    | 0.8560        | 65.91                            |
| 10.5                           | 3,467,057                                    | 766,070                               | 0.2210                    | 0.7790        | 56.41                            |
| 11.5                           | 2,710,291                                    | 402,404                               | 0.1485                    | 0.8515        | 43.95                            |
| 12.5                           | 2,315,669                                    | 409,505                               | 0.1768                    | 0.8232        | 37.42                            |
| 13.5                           | 1,529,599                                    | 226,812                               | 0.1483                    | 0.8517        | 30.81                            |
| 14.5                           | 1,282,247                                    | 97,608                                | 0.0761                    | 0.9239        | 26.24                            |
| 15.5                           | 1,170,347                                    | 43,454                                | 0.0371                    | 0.9629        | 24.24                            |
| 16.5                           | 702,477                                      | 24,560                                | 0.0350                    | 0.9650        | 23.34                            |
| 17.5                           | 500,939                                      | 45,598                                | 0.0910                    | 0.9090        | 22.52                            |
| 18.5                           | 455,341                                      | 72,406                                | 0.1590                    | 0.8410        | 20.47                            |
| 19.5                           | 391,206                                      | 11,835                                | 0.0303                    | 0.9697        | 17.22                            |
| 20.5                           | 385,866                                      | 93,972                                | 0.2435                    | 0.7565        | 16.70                            |
| 21.5                           | 272,616                                      | 20,302                                | 0.0745                    | 0.9255        | 12.63                            |
| 22.5                           | 206,895                                      | 27,379                                | 0.1323                    | 0.8677        | 11.69                            |
| 23.5                           | 176,897                                      |                                       | 0.0000                    | 1.0000        | 10.14                            |
| 24.5                           | 169,277                                      | 14,647                                | 0.0865                    | 0.9135        | 10.14                            |
| 25.5                           | 84,418                                       | 7,495                                 | 0.0888                    | 0.9112        | 9.27                             |
| 26.5                           | 62,257                                       |                                       | 0.0000                    | 1.0000        | 8.44                             |
| 27.5                           | 62,257                                       | 1,083                                 | 0.0174                    | 0.9826        | 8.44                             |
| 28.5                           | 61,174                                       | 6,354                                 | 0.1039                    | 0.8961        | 8.30                             |
| 29.5                           | 54,820                                       | 20,850                                | 0.3803                    | 0.6197        | 7.43                             |
| 30.5                           | 33,970                                       | 13,450                                | 0.3959                    | 0.6041        | 4.61                             |
| 31.5                           | 20,520                                       | 17,100                                | 0.8333                    | 0.1667        | 2.78                             |
| 32.5                           | 3,420                                        |                                       | 0.0000                    | 1.0000        | 0.46                             |
| 33.5                           | 3,420                                        |                                       | 0.0000                    | 1.0000        | 0.46                             |
| 34.5                           | 3,420                                        |                                       | 0.0000                    | 1.0000        | 0.46                             |
| 35.5                           | 3,420                                        |                                       | 0.0000                    | 1.0000        | 0.46                             |
| 36.5                           | 3,420                                        |                                       | 0.0000                    | 1.0000        | 0.46                             |
| 37.5                           | 3,420                                        |                                       | 0.0000                    | 1.0000        | 0.46                             |
| 38.5                           | 3,420                                        | 1,460                                 | 0.4269                    | 0.5731        | 0.46                             |

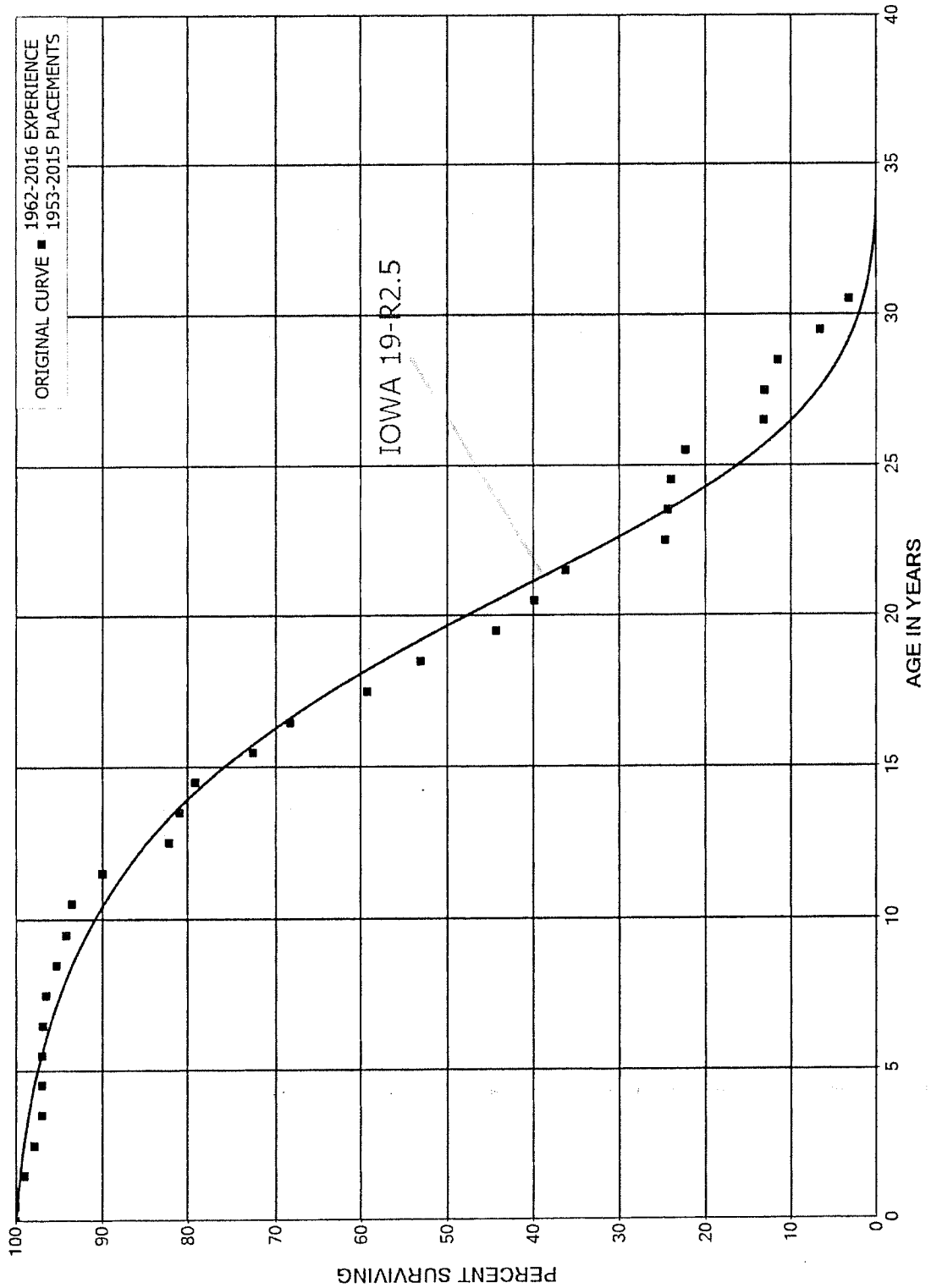
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 396 POWER OPERATED EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1946-2014       |                                              |                                       | EXPERIENCE BAND 1962-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 39.5                           | 1,960                                        |                                       | 0.0000                    | 1.0000        | 0.27                             |
| 40.5                           | 1,960                                        |                                       | 0.0000                    | 1.0000        | 0.27                             |
| 41.5                           | 1,960                                        | 547                                   | 0.2791                    | 0.7209        | 0.27                             |
| 42.5                           | 1,413                                        | 1,413                                 | 1.0000                    |               | 0.19                             |
| 43.5                           |                                              |                                       |                           |               |                                  |

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 1953-2015

EXPERIENCE BAND 1962-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|----------------------------------------------|---------------------------------------|----------------|---------------|----------------------------------|
| 0.0                            | 2,360,920                                    |                                       | 0.0000         | 1.0000        | 100.00                           |
| 0.5                            | 2,361,050                                    | 24,817                                | 0.0105         | 0.9895        | 100.00                           |
| 1.5                            | 2,287,466                                    | 25,461                                | 0.0111         | 0.9889        | 98.95                            |
| 2.5                            | 2,021,573                                    | 19,252                                | 0.0095         | 0.9905        | 97.85                            |
| 3.5                            | 1,981,765                                    |                                       | 0.0000         | 1.0000        | 96.92                            |
| 4.5                            | 1,998,263                                    | 398                                   | 0.0002         | 0.9998        | 96.92                            |
| 5.5                            | 1,563,806                                    | 588                                   | 0.0004         | 0.9996        | 96.90                            |
| 6.5                            | 1,558,951                                    | 4,945                                 | 0.0032         | 0.9968        | 96.86                            |
| 7.5                            | 1,570,021                                    | 20,188                                | 0.0129         | 0.9871        | 96.55                            |
| 8.5                            | 1,559,372                                    | 18,408                                | 0.0118         | 0.9882        | 95.31                            |
| 9.5                            | 1,538,549                                    | 10,809                                | 0.0070         | 0.9930        | 94.19                            |
| 10.5                           | 1,530,715                                    | 58,709                                | 0.0384         | 0.9616        | 93.52                            |
| 11.5                           | 1,472,006                                    | 126,457                               | 0.0859         | 0.9141        | 89.94                            |
| 12.5                           | 1,342,573                                    | 21,469                                | 0.0160         | 0.9840        | 82.21                            |
| 13.5                           | 1,321,104                                    | 27,550                                | 0.0209         | 0.9791        | 80.90                            |
| 14.5                           | 1,208,582                                    | 99,907                                | 0.0827         | 0.9173        | 79.21                            |
| 15.5                           | 991,478                                      | 59,243                                | 0.0598         | 0.9402        | 72.66                            |
| 16.5                           | 671,334                                      | 89,312                                | 0.1330         | 0.8670        | 68.32                            |
| 17.5                           | 521,921                                      | 54,563                                | 0.1045         | 0.8955        | 59.23                            |
| 18.5                           | 462,653                                      | 76,796                                | 0.1660         | 0.8340        | 53.04                            |
| 19.5                           | 311,992                                      | 30,645                                | 0.0982         | 0.9018        | 44.23                            |
| 20.5                           | 154,142                                      | 14,422                                | 0.0936         | 0.9064        | 39.89                            |
| 21.5                           | 127,978                                      | 40,773                                | 0.3186         | 0.6814        | 36.16                            |
| 22.5                           | 257,286                                      | 3,924                                 | 0.0153         | 0.9847        | 24.64                            |
| 23.5                           | 479,993                                      | 5,256                                 | 0.0109         | 0.9891        | 24.26                            |
| 24.5                           | 304,658                                      | 21,170                                | 0.0695         | 0.9305        | 24.00                            |
| 25.5                           | 56,856                                       | 23,255                                | 0.4090         | 0.5910        | 22.33                            |
| 26.5                           | 33,601                                       | 397                                   | 0.0118         | 0.9882        | 13.20                            |
| 27.5                           | 33,204                                       | 3,978                                 | 0.1198         | 0.8802        | 13.04                            |
| 28.5                           | 29,225                                       | 12,669                                | 0.4335         | 0.5665        | 11.48                            |
| 29.5                           | 16,557                                       | 8,428                                 | 0.5090         | 0.4910        | 6.50                             |
| 30.5                           | 8,129                                        | 2,202                                 | 0.2709         | 0.7291        | 3.19                             |
| 31.5                           | 5,927                                        |                                       | 0.0000         | 1.0000        | 2.33                             |
| 32.5                           | 5,927                                        | 654                                   | 0.1104         | 0.8896        | 2.33                             |
| 33.5                           | 5,272                                        | 175                                   | 0.0332         | 0.9668        | 2.07                             |
| 34.5                           | 5,097                                        |                                       | 0.0000         | 1.0000        | 2.00                             |
| 35.5                           | 5,097                                        |                                       | 0.0000         | 1.0000        | 2.00                             |
| 36.5                           | 5,097                                        | 605                                   | 0.1187         | 0.8813        | 2.00                             |
| 37.5                           | 4,493                                        | 121                                   | 0.0269         | 0.9731        | 1.76                             |
| 38.5                           | 4,372                                        |                                       | 0.0000         | 1.0000        | 1.72                             |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 397.5 COMMUNICATION EQUIPMENT - TELEMETERING

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1953-2015       |                                              |                                       | EXPERIENCE BAND 1962-2016 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 39.5                           | 4,372                                        | 45                                    | 0.0102                    | 0.9898        | 1.72                             |
| 40.5                           | 4,327                                        | 2,211                                 | 0.5108                    | 0.4892        | 1.70                             |
| 41.5                           | 2,117                                        | 1,425                                 | 0.6731                    | 0.3269        | 0.83                             |
| 42.5                           | 692                                          |                                       | 0.0000                    | 1.0000        | 0.27                             |
| 43.5                           | 692                                          |                                       | 0.0000                    | 1.0000        | 0.27                             |
| 44.5                           | 692                                          | 692                                   | 1.0000                    |               | 0.27                             |
| 45.5                           |                                              |                                       |                           |               |                                  |

---

## **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, 2018

| YEAR<br>INST<br>(1) | ORIGINAL<br>COST<br>(2) | ACCRUED<br>DEPRECIATION<br>(3) | DEPRECIATED ORIGINAL COST  |                             | PCT OF<br>COL 4<br>TOTAL<br>(6) |
|---------------------|-------------------------|--------------------------------|----------------------------|-----------------------------|---------------------------------|
|                     |                         |                                | AMOUNT<br>(2) - (3)<br>(4) | CUMULATIVE<br>AMOUNT<br>(5) |                                 |
| 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                | 1,680                   | 1,680                          |                            |                             | 0.0                             |
| 1891                | 8,350                   | 8,350                          |                            |                             | 0.0                             |
| 1892                | 1,355                   | 1,355                          |                            |                             | 0.0                             |
| 1893                | 651                     | 651                            |                            |                             | 0.0                             |
| 1894                | 1,617                   | 1,617                          |                            |                             | 0.0                             |
| 1895                | 1,133                   | 1,133                          |                            |                             | 0.0                             |
| 1896                | 4,261                   | 4,261                          |                            |                             | 0.0                             |
| 1897                | 2,268                   | 2,268                          |                            |                             | 0.0                             |
| 1898                | 1,634                   | 1,634                          |                            |                             | 0.0                             |
| 1899                | 934                     | 934                            |                            |                             | 0.0                             |
| 1900                | 8,185                   | 8,185                          |                            |                             | 0.0                             |
| 1901                | 15,228                  | 15,228                         |                            |                             | 0.0                             |
| 1902                | 7,331                   | 7,331                          |                            |                             | 0.0                             |
| 1903                | 15,446                  | 15,446                         |                            |                             | 0.0                             |
| 1904                | 8,443                   | 8,443                          |                            |                             | 0.0                             |
| 1905                | 13,211                  | 13,211                         |                            |                             | 0.0                             |
| 1906                | 5,827                   | 5,827                          |                            |                             | 0.0                             |
| 1907                | 4,319                   | 4,319                          |                            |                             | 0.0                             |
| 1908                | 5,086                   | 5,086                          |                            |                             | 0.0                             |
| 1909                | 5,578                   | 5,578                          |                            |                             | 0.0                             |
| 1910                | 945                     | 945                            |                            |                             | 0.0                             |
| 1911                | 2,363                   | 2,306                          | 57                         | 57                          | 0.0                             |
| 1912                | 1,637                   | 1,632                          | 5                          | 62                          | 0.0                             |
| 1913                | 4,703                   | 4,655                          | 48                         | 110                         | 0.0                             |
| 1914                | 6,627                   | 6,617                          | 10                         | 120                         | 0.0                             |
| 1915                | 9,690                   | 9,651                          | 39                         | 159                         | 0.0                             |
| 1916                | 2,191                   | 2,192                          | 1-                         | 158                         | 0.0                             |
| 1917                | 3,977                   | 3,881                          | 96                         | 254                         | 0.0                             |
| 1918                | 1,699                   | 1,692                          | 7                          | 261                         | 0.0                             |
| 1919                | 1,218                   | 1,210                          | 8                          | 269                         | 0.0                             |
| 1920                | 2,337                   | 2,224                          | 113                        | 382                         | 0.0                             |
| 1921                | 17,561                  | 15,935                         | 1,626                      | 2,008                       | 0.0                             |
| 1922                | 6,830                   | 6,714                          | 116                        | 2,124                       | 0.0                             |
| 1923                | 9,084                   | 8,792                          | 292                        | 2,416                       | 0.0                             |
| 1924                | 24,921                  | 22,541                         | 2,380                      | 4,796                       | 0.0                             |
| 1925                | 22,267                  | 20,748                         | 1,519                      | 6,315                       | 0.0                             |
| 1926                | 47,198                  | 42,539                         | 4,659                      | 10,974                      | 0.0                             |

COLUMBIA GAS OF PENNSYLVANIA, INC.

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR<br>INST<br>(1) | ORIGINAL<br>COST<br>(2) | ACCRUED<br>DEPRECIATION<br>(3) | DEPRECIATED ORIGINAL COST  |                             | PCT OF<br>COL 4<br>TOTAL<br>(6) |
|---------------------|-------------------------|--------------------------------|----------------------------|-----------------------------|---------------------------------|
|                     |                         |                                | AMOUNT<br>(2) - (3)<br>(4) | CUMULATIVE<br>AMOUNT<br>(5) |                                 |
| 1927                | 27,708                  | 25,394                         | 2,314                      | 13,288                      | 0.0                             |
| 1928                | 34,579                  | 31,601                         | 2,978                      | 16,266                      | 0.0                             |
| 1929                | 56,828                  | 51,028                         | 5,800                      | 22,066                      | 0.0                             |
| 1930                | 24,585                  | 21,360                         | 3,225                      | 25,291                      | 0.0                             |
| 1931                | 17,763                  | 15,857                         | 1,906                      | 27,197                      | 0.0                             |
| 1932                | 5,682                   | 4,766                          | 916                        | 28,113                      | 0.0                             |
| 1933                | 12,002                  | 9,890                          | 2,112                      | 30,225                      | 0.0                             |
| 1934                | 10,375                  | 9,188                          | 1,187                      | 31,412                      | 0.0                             |
| 1935                | 3,105                   | 2,735                          | 370                        | 31,782                      | 0.0                             |
| 1936                | 12,274                  | 10,678                         | 1,596                      | 33,378                      | 0.0                             |
| 1937                | 39,679                  | 38,298                         | 1,381                      | 34,759                      | 0.0                             |
| 1938                | 51,751                  | 49,317                         | 2,434                      | 37,193                      | 0.0                             |
| 1939                | 193,294                 | 172,040                        | 21,254                     | 58,447                      | 0.0                             |
| 1940                | 120,701                 | 115,355                        | 5,346                      | 63,793                      | 0.0                             |
| 1941                | 175,387                 | 168,202                        | 7,185                      | 70,978                      | 0.0                             |
| 1942                | 99,293                  | 94,046                         | 5,247                      | 76,225                      | 0.0                             |
| 1943                | 62,971                  | 59,964                         | 3,007                      | 79,232                      | 0.0                             |
| 1944                | 32,365                  | 30,311                         | 2,054                      | 81,286                      | 0.0                             |
| 1945                | 28,335                  | 26,185                         | 2,150                      | 83,436                      | 0.0                             |
| 1946                | 132,863                 | 126,014                        | 6,849                      | 90,285                      | 0.0                             |
| 1947                | 120,283                 | 110,868                        | 9,415                      | 99,700                      | 0.0                             |
| 1948                | 271,398                 | 252,249                        | 19,149                     | 118,849                     | 0.0                             |
| 1949                | 609,911                 | 576,319                        | 33,592                     | 152,441                     | 0.0                             |
| 1950                | 1,103,403               | 1,044,786                      | 58,617                     | 211,058                     | 0.0                             |
| 1951                | 972,241                 | 909,834                        | 62,407                     | 273,465                     | 0.0                             |
| 1952                | 2,012,577               | 1,848,077                      | 164,500                    | 437,965                     | 0.0                             |
| 1953                | 1,382,152               | 1,293,921                      | 88,231                     | 526,196                     | 0.0                             |
| 1954                | 1,798,070               | 1,665,522                      | 132,548                    | 658,744                     | 0.0                             |
| 1955                | 4,210,597               | 3,882,410                      | 328,187                    | 986,931                     | 0.1                             |
| 1956                | 2,728,115               | 2,441,408                      | 286,707                    | 1,273,638                   | 0.1                             |
| 1957                | 3,568,608               | 3,214,538                      | 354,070                    | 1,627,708                   | 0.1                             |
| 1958                | 4,204,569               | 3,777,689                      | 426,880                    | 2,054,588                   | 0.1                             |
| 1959                | 3,585,573               | 3,155,553                      | 430,020                    | 2,484,608                   | 0.1                             |
| 1960                | 3,974,722               | 3,433,154                      | 541,568                    | 3,026,176                   | 0.2                             |
| 1961                | 4,300,375               | 3,745,073                      | 555,302                    | 3,581,478                   | 0.2                             |
| 1962                | 3,948,925               | 3,340,660                      | 608,265                    | 4,189,743                   | 0.2                             |
| 1963                | 4,851,099               | 4,148,560                      | 702,539                    | 4,892,282                   | 0.3                             |
| 1964                | 4,947,007               | 4,185,991                      | 761,016                    | 5,653,298                   | 0.3                             |
| 1965                | 4,120,942               | 3,451,330                      | 669,612                    | 6,322,910                   | 0.3                             |
| 1966                | 5,673,356               | 4,755,480                      | 917,876                    | 7,240,786                   | 0.4                             |
| 1967                | 5,477,750               | 4,561,412                      | 916,338                    | 8,157,124                   | 0.4                             |
| 1968                | 4,804,459               | 3,779,912                      | 1,024,547                  | 9,181,671                   | 0.5                             |
| 1969                | 4,286,301               | 3,178,171                      | 1,108,130                  | 10,289,801                  | 0.5                             |

COLUMBIA GAS OF PENNSYLVANIA, INC.

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR<br>INST<br>(1) | ORIGINAL<br>COST<br>(2) | ACCRUED<br>DEPRECIATION<br>(3) | DEPRECIATED ORIGINAL COST  |                             | PCT OF<br>COL 4<br>TOTAL<br>(6) |
|---------------------|-------------------------|--------------------------------|----------------------------|-----------------------------|---------------------------------|
|                     |                         |                                | AMOUNT<br>(2) - (3)<br>(4) | CUMULATIVE<br>AMOUNT<br>(5) |                                 |
| 1970                | 4,255,607               | 3,235,893                      | 1,019,714                  | 11,309,515                  | 0.6                             |
| 1971                | 6,164,199               | 4,443,455                      | 1,720,744                  | 13,030,259                  | 0.7                             |
| 1972                | 3,622,757               | 2,290,717                      | 1,332,040                  | 14,362,299                  | 0.7                             |
| 1973                | 4,135,644               | 2,028,545                      | 2,107,099                  | 16,469,398                  | 0.8                             |
| 1974                | 3,413,127               | 1,297,559                      | 2,115,568                  | 18,584,966                  | 1.0                             |
| 1975                | 3,510,089               | 1,345,366                      | 2,164,723                  | 20,749,689                  | 1.1                             |
| 1976                | 3,556,348               | 1,764,699                      | 1,791,649                  | 22,541,338                  | 1.2                             |
| 1977                | 7,568,654               | 3,792,065                      | 3,776,589                  | 26,317,927                  | 1.3                             |
| 1978                | 7,285,255               | 3,629,498                      | 3,655,757                  | 29,973,684                  | 1.5                             |
| 1979                | 9,007,833               | 4,411,720                      | 4,596,113                  | 34,569,797                  | 1.8                             |
| 1980                | 11,998,804              | 5,962,143                      | 6,036,661                  | 40,606,458                  | 2.1                             |
| 1981                | 14,017,684              | 6,858,878                      | 7,158,806                  | 47,765,264                  | 2.4                             |
| 1982                | 13,117,082              | 6,071,337                      | 7,045,745                  | 54,811,009                  | 2.8                             |
| 1983                | 10,860,431              | 5,019,916                      | 5,840,515                  | 60,651,524                  | 3.1                             |
| 1984                | 12,538,816              | 5,696,337                      | 6,842,479                  | 67,494,003                  | 3.5                             |
| 1985                | 12,524,817              | 5,718,241                      | 6,806,576                  | 74,300,579                  | 3.8                             |
| 1986                | 14,131,567              | 6,353,623                      | 7,777,944                  | 82,078,523                  | 4.2                             |
| 1987                | 14,633,131              | 6,617,072                      | 8,016,059                  | 90,094,582                  | 4.6                             |
| 1988                | 17,002,631              | 7,423,767                      | 9,578,864                  | 99,673,446                  | 5.1                             |
| 1989                | 16,289,492              | 7,099,973                      | 9,189,519                  | 108,862,965                 | 5.6                             |
| 1990                | 14,396,900              | 6,218,497                      | 8,178,403                  | 117,041,368                 | 6.0                             |
| 1991                | 14,275,066              | 6,061,668                      | 8,213,398                  | 125,254,766                 | 6.4                             |
| 1992                | 15,947,404              | 6,553,563                      | 9,393,841                  | 134,648,607                 | 6.9                             |
| 1993                | 17,391,779              | 7,167,943                      | 10,223,836                 | 144,872,443                 | 7.4                             |
| 1994                | 20,626,006              | 8,182,181                      | 12,443,825                 | 157,316,268                 | 8.1                             |
| 1995                | 20,638,538              | 8,251,204                      | 12,387,334                 | 169,703,602                 | 8.7                             |
| 1996                | 21,369,639              | 8,312,463                      | 13,057,176                 | 182,760,778                 | 9.4                             |
| 1997                | 23,474,396              | 8,486,092                      | 14,988,304                 | 197,749,082                 | 10.1                            |
| 1998                | 22,037,224              | 8,037,593                      | 13,999,631                 | 211,748,713                 | 10.8                            |
| 1999                | 20,996,305              | 7,044,805                      | 13,951,500                 | 225,700,213                 | 11.6                            |
| 2000                | 21,862,330              | 7,613,663                      | 14,248,667                 | 239,948,880                 | 12.3                            |
| 2001                | 22,205,129              | 7,016,108                      | 15,189,021                 | 255,137,901                 | 13.1                            |
| 2002                | 17,906,180              | 5,577,018                      | 12,329,162                 | 267,467,063                 | 13.7                            |
| 2003                | 22,058,701              | 6,476,951                      | 15,581,750                 | 283,048,813                 | 14.5                            |
| 2004                | 30,496,406              | 7,982,939                      | 22,513,467                 | 305,562,280                 | 15.7                            |
| 2005                | 36,265,119              | 8,440,544                      | 27,824,575                 | 333,386,855                 | 17.1                            |
| 2006                | 25,116,212              | 5,801,461                      | 19,314,751                 | 352,701,606                 | 18.1                            |
| 2007                | 57,286,098              | 11,635,165                     | 45,650,933                 | 398,352,539                 | 20.4                            |
| 2008                | 80,523,789              | 15,057,086                     | 65,466,703                 | 463,819,242                 | 23.8                            |
| 2009                | 56,172,261              | 10,009,174                     | 46,163,087                 | 509,982,329                 | 26.1                            |
| 2010                | 69,985,533              | 11,383,374                     | 58,602,159                 | 568,584,488                 | 29.1                            |
| 2011                | 126,297,464             | 21,596,989                     | 104,700,475                | 673,284,963                 | 34.5                            |
| 2012                | 139,472,858             | 20,141,794                     | 119,331,064                | 792,616,027                 | 40.6                            |
| 2013                | 167,423,330             | 18,581,345                     | 148,841,985                | 941,458,012                 | 48.2                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR<br>INST<br>(1)     | ORIGINAL<br>COST<br>(2) | ACCRUED<br>DEPRECIATION<br>(3) | DEPRECIATED ORIGINAL COST  |                             | PCT OF<br>COL 4<br>TOTAL<br>(6) |
|-------------------------|-------------------------|--------------------------------|----------------------------|-----------------------------|---------------------------------|
|                         |                         |                                | AMOUNT<br>(2) - (3)<br>(4) | CUMULATIVE<br>AMOUNT<br>(5) |                                 |
| 2014                    | 185,801,471             | 18,440,246                     | 167,361,225                | 1,108,819,237               | 56.8                            |
| 2015                    | 179,429,237             | 14,280,614                     | 165,148,623                | 1,273,967,860               | 65.3                            |
| 2016                    | 222,361,114             | 12,605,945                     | 209,755,169                | 1,483,723,029               | 76.0                            |
| 2017                    | 256,488,540             | 9,776,147                      | 246,712,393                | 1,730,435,422               | 88.7                            |
| 2018                    | 224,513,761             | 3,035,300                      | 221,478,461                | 1,951,913,883               | 100.0                           |
| SUBTOTAL                | 2,396,855,877           | 444,941,991                    | 1,951,913,887              |                             |                                 |
| AMORTIZABLE<br>PLANT    | 38,489,489              | 13,943,734                     | 24,545,755                 |                             |                                 |
| NONDEPRECIABLE<br>PLANT | 172,413                 | -                              | 172,413                    |                             |                                 |
| TOTAL                   | 2,435,517,779           | 458,885,725                    | 1,976,632,055              |                             |                                 |

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, 2018

| YEAR<br>(1) | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
|-------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|

INTERIM SURVIVOR CURVE.. SQUARE  
PROBABLE RETIREMENT YEAR.. 6-2025  
NET SALVAGE PERCENT.. 0

|      |          |       |       |   |      |  |
|------|----------|-------|-------|---|------|--|
| 1972 | 1,896.43 | 1,661 | 1,896 |   |      |  |
| 1973 | 35.65    | 31    | 35    | 1 | 6.58 |  |
|      | 1,932.08 | 1,692 | 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, 2018

| YEAR<br>(1)                           | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|---------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| INTERIM SURVIVOR CURVE.. IOWA 65-R2.5 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 6-2025     |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0               |                         |                              |                               |                                |                     |                          |
| 1970                                  | 124,246.77              | 108,766                      | 96,362                        | 27,885                         | 6.26                | 4,454                    |
| 1971                                  | 44,955.88               | 39,264                       | 34,786                        | 10,170                         | 6.27                | 1,622                    |
| 1972                                  | 23,833.95               | 20,761                       | 18,393                        | 5,441                          | 6.29                | 865                      |
| 1973                                  | 1,046.90                | 910                          | 806                           | 241                            | 6.30                | 38                       |
| 1996                                  | 107,318.16              | 83,236                       | 73,744                        | 33,574                         | 6.49                | 5,173                    |
| 1997                                  | 932.86                  | 715                          | 633                           | 300                            | 6.52                | 46                       |
| 1998                                  | 7,804.72                | 5,928                        | 5,252                         | 2,553                          | 6.47                | 395                      |
| 2001                                  | 87,639.68               | 63,802                       | 56,526                        | 31,114                         | 6.51                | 4,779                    |
| 2003                                  | 212,167.85              | 149,154                      | 132,144                       | 80,024                         | 6.51                | 12,292                   |
| 2004                                  | 195,419.81              | 134,664                      | 119,307                       | 76,113                         | 6.50                | 11,710                   |
| 2008                                  | 670,893.34              | 412,331                      | 365,308                       | 305,585                        | 6.53                | 46,797                   |
| 2009                                  | 11,299.51               | 6,671                        | 5,910                         | 5,390                          | 6.53                | 825                      |
| 2012                                  | 59,116.96               | 29,287                       | 25,947                        | 33,170                         | 6.54                | 5,072                    |
| 2013                                  | 744,499.19              | 337,556                      | 299,061                       | 445,438                        | 6.53                | 68,214                   |
| 2014                                  | 847,869.30              | 341,861                      | 302,875                       | 544,994                        | 6.54                | 83,332                   |
| 2015                                  | 51,937.15               | 17,835                       | 15,801                        | 36,136                         | 6.53                | 5,534                    |
| 2016                                  | 9,550.22                | 2,580                        | 2,286                         | 7,264                          | 6.53                | 1,112                    |
| 2017                                  | 86,590.33               | 15,820                       | 14,016                        | 72,574                         | 6.52                | 11,131                   |
|                                       | 3,287,122.58            | 1,771,141                    | 1,569,157                     | 1,717,966                      |                     | 263,391                  |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.5 8.01



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 352 WELLS - CONSTRUCTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR<br>(1)                                                           | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| INTERIM SURVIVOR CURVE.. SQUARE                                       |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 6-2025                                     |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                               |                         |                              |                               |                                |                     |                          |
| 1970                                                                  | 326,259.85              | 287,226                      | 326,260                       |                                |                     |                          |
| 1971                                                                  | 246,359.45              | 216,341                      | 246,359                       |                                |                     |                          |
| 1972                                                                  | 166,322.06              | 145,673                      | 166,322                       |                                |                     |                          |
| 1978                                                                  | 60,192.37               | 51,761                       | 60,177                        | 15                             | 6.58                | 2                        |
|                                                                       | 799,133.73              | 701,001                      | 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, 2018

| YEAR<br>(1) | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
|-------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|

INTERIM SURVIVOR CURVE.. IOWA 50-S2.5

PROBABLE RETIREMENT YEAR.. 6-2025

NET SALVAGE PERCENT.. 0

|      |           |        |        |  |  |  |
|------|-----------|--------|--------|--|--|--|
| 1970 | 62,707.48 | 55,307 | 62,707 |  |  |  |
| 1971 | 61,403.78 | 54,031 | 61,404 |  |  |  |
| 1972 | 42,286.87 | 37,110 | 42,287 |  |  |  |
| 1978 | 2,281.54  | 1,992  | 2,282  |  |  |  |

|  |            |         |         |  |  |  |
|--|------------|---------|---------|--|--|--|
|  | 168,679.67 | 148,440 | 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, 2018

| YEAR<br>(1)                                                      | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| INTERIM SURVIVOR CURVE.. SQUARE                                  |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 6-2025                                |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                          |                         |                              |                               |                                |                     |                          |
| 1970                                                             | 206,940.78              | 182,182                      | 206,932                       | 9                              | 6.58                | 1                        |
|                                                                  | 206,940.78              | 182,182                      | 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, 2018

| YEAR<br>(1)                           | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|---------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| INTERIM SURVIVOR CURVE.. IOWA 50-S1.5 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 6-2025     |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0               |                         |                              |                               |                                |                     |                          |
| 1971                                  | 260,327.01              | 226,745                      | 260,327                       |                                |                     |                          |
| 1972                                  | 56,879.31               | 49,419                       | 56,879                        |                                |                     |                          |
| 1973                                  | 54,831.76               | 47,530                       | 54,832                        |                                |                     |                          |
| 1984                                  | 13,885.22               | 11,804                       | 13,885                        |                                |                     |                          |
| 1989                                  | 13,619.22               | 11,258                       | 13,620                        |                                |                     |                          |
|                                       | 399,542.52              | 346,756                      | 399,543                       |                                |                     |                          |

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, 2018

| YEAR<br>(1)                           | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|---------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| INTERIM SURVIVOR CURVE.. IOWA 55-R2.5 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 6-2025     |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0               |                         |                              |                               |                                |                     |                          |
| 1950                                  | 5,342.87                | 4,861                        | 5,343                         |                                |                     |                          |
| 1952                                  | 23,888.55               | 21,669                       | 23,889                        |                                |                     |                          |
| 1957                                  | 363.93                  | 328                          | 364                           |                                |                     |                          |
| 1967                                  | 1,175.28                | 1,037                        | 1,174                         | 1                              | 5.83                |                          |
| 1969                                  | 2,168.00                | 1,903                        | 2,155                         | 13                             | 5.92                | 2                        |
| 1970                                  | 491,576.16              | 430,345                      | 487,362                       | 4,214                          | 5.96                | 707                      |
| 1971                                  | 21,258.89               | 18,567                       | 21,027                        | 232                            | 5.99                | 39                       |
| 1972                                  | 4,125.93                | 3,593                        | 4,069                         | 57                             | 6.03                | 9                        |
| 1979                                  | 1,860.35                | 1,606                        | 1,819                         | 41                             | 6.25                | 7                        |
| 1987                                  | 19,667.77               | 16,373                       | 18,542                        | 1,126                          | 6.32                | 178                      |
| 1991                                  | 11,137.86               | 9,038                        | 10,235                        | 903                            | 6.37                | 142                      |
| 1993                                  | 1,506.99                | 1,203                        | 1,362                         | 145                            | 6.43                | 23                       |
| 2013                                  | 280,679.08              | 127,400                      | 144,280                       | 136,399                        | 6.52                | 20,920                   |
|                                       | 864,751.66              | 637,923                      | 721,621                       | 143,131                        |                     | 22,027                   |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.5 2.55

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 355 MEASURING AND REGULATING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR<br>(1)                                                           | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| INTERIM SURVIVOR CURVE.. IOWA 37-R1.5                                 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 6-2025                                     |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                               |                         |                              |                               |                                |                     |                          |
| 1970                                                                  | 56,228.75               | 48,817                       | 56,229                        |                                |                     |                          |
| 1975                                                                  | 2,685.09                | 2,294                        | 2,685                         |                                |                     |                          |
| 1981                                                                  | 13,738.52               | 11,977                       | 13,739                        |                                |                     |                          |
| 1986                                                                  | 29,489.73               | 25,046                       | 29,490                        |                                |                     |                          |
| 1987                                                                  | 2,334.83                | 1,973                        | 2,334                         |                                |                     |                          |
|                                                                       | 104,476.92              | 90,107                       | 104,477                       |                                |                     |                          |
| 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, 2018

| YEAR<br>(1)                   | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 70-R2.5 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0       |                         |                              |                               |                                |                     |                          |
| 1957                          | 2,992.86                | 2,090                        | 1,934                         | 1,059                          | 21.12               | 50                       |
| 1961                          | 777.55                  | 517                          | 478                           | 300                            | 23.46               | 13                       |
| 1962                          | 304.59                  | 200                          | 185                           | 120                            | 24.07               | 5                        |
| 1963                          | 5,390.55                | 3,489                        | 3,229                         | 2,162                          | 24.69               | 88                       |
| 1964                          | 3,508.86                | 2,240                        | 2,073                         | 1,436                          | 25.32               | 57                       |
| 1965                          | 1,090.80                | 686                          | 635                           | 456                            | 25.96               | 18                       |
| 1966                          | 2,266.07                | 1,405                        | 1,300                         | 966                            | 26.61               | 36                       |
| 1967                          | 10,933.47               | 6,674                        | 6,177                         | 4,756                          | 27.27               | 174                      |
| 1968                          | 1,914.93                | 1,151                        | 1,065                         | 850                            | 27.94               | 30                       |
| 1969                          | 11,767.09               | 6,956                        | 6,438                         | 5,329                          | 28.62               | 186                      |
| 1970                          | 7,768.83                | 4,517                        | 4,180                         | 3,589                          | 29.30               | 122                      |
| 1971                          | 20,001.56               | 11,432                       | 10,580                        | 9,422                          | 29.99               | 314                      |
| 1972                          | 11,288.00               | 6,337                        | 5,865                         | 5,423                          | 30.70               | 177                      |
| 1973                          | 5,327.52                | 2,937                        | 2,718                         | 2,610                          | 31.41               | 83                       |
| 1974                          | 16,243.80               | 8,790                        | 8,135                         | 8,109                          | 32.12               | 252                      |
| 1975                          | 24,648.34               | 13,081                       | 12,106                        | 12,542                         | 32.85               | 382                      |
| 1976                          | 23,785.23               | 14,024                       | 12,979                        | 10,806                         | 29.53               | 366                      |
| 1977                          | 53,345.13               | 30,930                       | 28,625                        | 24,720                         | 30.01               | 824                      |
| 1978                          | 20,767.88               | 11,750                       | 10,874                        | 9,894                          | 31.01               | 319                      |
| 1979                          | 35,879.52               | 19,942                       | 18,456                        | 17,424                         | 31.50               | 553                      |
| 1980                          | 22,599.98               | 12,328                       | 11,409                        | 11,191                         | 32.01               | 350                      |
| 1981                          | 39,336.45               | 21,049                       | 19,480                        | 19,856                         | 32.51               | 611                      |
| 1982                          | 61,966.20               | 32,272                       | 29,867                        | 32,099                         | 33.51               | 958                      |
| 1983                          | 39,654.97               | 20,224                       | 18,717                        | 20,938                         | 34.03               | 615                      |
| 1984                          | 44,196.03               | 22,054                       | 20,410                        | 23,786                         | 34.55               | 688                      |
| 1985                          | 65,225.51               | 31,824                       | 29,452                        | 35,774                         | 35.08               | 1,020                    |
| 1986                          | 39,551.43               | 18,846                       | 17,441                        | 22,110                         | 35.61               | 621                      |
| 1987                          | 63,197.02               | 29,184                       | 27,009                        | 36,188                         | 36.61               | 988                      |
| 1988                          | 97,850.15               | 44,052                       | 40,769                        | 57,081                         | 37.15               | 1,537                    |
| 1989                          | 129,870.93              | 56,922                       | 52,679                        | 77,192                         | 37.70               | 2,048                    |
| 1990                          | 83,326.74               | 35,514                       | 32,867                        | 50,460                         | 38.25               | 1,319                    |
| 1991                          | 48,843.59               | 20,084                       | 18,587                        | 30,257                         | 39.25               | 771                      |
| 1992                          | 13,362.80               | 5,330                        | 4,933                         | 8,430                          | 39.81               | 212                      |
| 1993                          | 43,012.37               | 16,616                       | 15,378                        | 27,634                         | 40.38               | 684                      |
| 1994                          | 35,061.99               | 13,099                       | 12,123                        | 22,939                         | 40.94               | 560                      |
| 1995                          | 19,151.72               | 6,906                        | 6,391                         | 12,761                         | 41.52               | 307                      |
| 1996                          | 45,757.38               | 15,795                       | 14,618                        | 31,139                         | 42.52               | 732                      |
| 1997                          | 41,117.99               | 13,651                       | 12,634                        | 28,484                         | 43.10               | 661                      |
| 1998                          | 9,137.60                | 2,910                        | 2,693                         | 6,445                          | 43.69               | 148                      |
| 1999                          | 5,999.88                | 1,829                        | 1,693                         | 4,307                          | 44.28               | 97                       |
| 2000                          | 14,157.15               | 4,120                        | 3,813                         | 10,344                         | 44.87               | 231                      |
| 2001                          | 13,568.68               | 3,757                        | 3,477                         | 10,092                         | 45.48               | 222                      |
| 2002                          | 3,015.30                | 792                          | 733                           | 2,282                          | 46.08               | 50                       |

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, 2018

| YEAR<br>(1)                                                       | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 70-R2.5                                     |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                           |                         |                              |                               |                                |                     |                          |
| 2003                                                              | 43,512.48               | 10,735                       | 9,935                         | 33,577                         | 47.08               | 713                      |
| 2004                                                              | 46,136.38               | 10,708                       | 9,910                         | 36,226                         | 47.70               | 759                      |
| 2005                                                              | 26,706.25               | 5,806                        | 5,373                         | 21,333                         | 48.31               | 442                      |
| 2006                                                              | 37,561.54               | 7,602                        | 7,035                         | 30,527                         | 48.93               | 624                      |
| 2007                                                              | 66,805.64               | 12,506                       | 11,574                        | 55,232                         | 49.56               | 1,114                    |
| 2008                                                              | 28,062.79               | 4,852                        | 4,490                         | 23,573                         | 49.83               | 473                      |
| 2009                                                              | 154,482.66              | 24,300                       | 22,489                        | 131,994                        | 50.46               | 2,616                    |
| 2010                                                              | 80,344.92               | 11,361                       | 10,514                        | 69,831                         | 51.11               | 1,366                    |
| 2011                                                              | 76,709.52               | 9,612                        | 8,896                         | 67,814                         | 51.76               | 1,310                    |
| 2012                                                              | 207,719.95              | 22,787                       | 21,088                        | 186,632                        | 52.06               | 3,585                    |
| 2013                                                              | 199,191.23              | 18,565                       | 17,181                        | 182,010                        | 52.72               | 3,452                    |
| 2014                                                              | 95,731.81               | 7,352                        | 6,804                         | 88,928                         | 53.06               | 1,676                    |
| 2015                                                              | 127,176.17              | 7,694                        | 7,121                         | 120,055                        | 53.08               | 2,262                    |
| 2016                                                              | 171,903.72              | 7,478                        | 6,921                         | 164,983                        | 53.14               | 3,105                    |
| 2017                                                              | 77,084.88               | 2,066                        | 1,912                         | 75,173                         | 52.89               | 1,421                    |
| 2018                                                              | 204,834.00              | 1,659                        | 1,535                         | 203,299                        | 50.87               | 3,996                    |
|                                                                   | 2,882,928.38            | 743,389                      | 687,983                       | 2,194,945                      |                     | 48,393                   |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 45.4 |                         |                              |                               |                                |                     | 1.68                     |



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, 2018

| YEAR                        | ORIGINAL<br>COST | CALCULATED<br>ACCRUED | ALLOC. BOOK<br>RESERVE | FUTURE BOOK<br>ACCRUALS | REM.<br>LIFE | ANNUAL<br>ACCRUAL |
|-----------------------------|------------------|-----------------------|------------------------|-------------------------|--------------|-------------------|
| (1)                         | (2)              | (3)                   | (4)                    | (5)                     | (6)          | (7)               |
| SURVIVOR CURVE.. IOWA 80-S4 |                  |                       |                        |                         |              |                   |
| NET SALVAGE PERCENT.. 0     |                  |                       |                        |                         |              |                   |
| 1883                        | 866.25           | 852                   | 866                    |                         |              |                   |
| 1884                        | 2,319.40         | 2,279                 | 2,319                  |                         |              |                   |
| 1885                        | 952.00           | 934                   | 952                    |                         |              |                   |
| 1886                        | 9,401.15         | 9,217                 | 9,401                  |                         |              |                   |
| 1887                        | 4,690.00         | 4,592                 | 4,690                  |                         |              |                   |
| 1888                        | 6,579.75         | 6,432                 | 6,580                  |                         |              |                   |
| 1889                        | 6,551.18         | 6,398                 | 6,551                  |                         |              |                   |
| 1890                        | 1,679.50         | 1,638                 | 1,680                  |                         |              |                   |
| 1891                        | 8,350.23         | 8,135                 | 8,350                  |                         |              |                   |
| 1892                        | 1,354.95         | 1,318                 | 1,355                  |                         |              |                   |
| 1893                        | 650.85           | 632                   | 651                    |                         |              |                   |
| 1894                        | 1,616.78         | 1,569                 | 1,617                  |                         |              |                   |
| 1895                        | 1,133.20         | 1,098                 | 1,133                  |                         |              |                   |
| 1896                        | 4,260.56         | 4,122                 | 4,261                  |                         |              |                   |
| 1897                        | 2,267.65         | 2,191                 | 2,268                  |                         |              |                   |
| 1898                        | 1,633.73         | 1,576                 | 1,634                  |                         |              |                   |
| 1899                        | 934.25           | 900                   | 934                    |                         |              |                   |
| 1900                        | 8,185.42         | 7,872                 | 8,185                  |                         |              |                   |
| 1901                        | 15,227.76        | 14,624                | 15,228                 |                         |              |                   |
| 1902                        | 7,330.74         | 7,029                 | 7,331                  |                         |              |                   |
| 1903                        | 15,446.32        | 14,788                | 15,446                 |                         |              |                   |
| 1904                        | 8,443.31         | 8,069                 | 8,443                  |                         |              |                   |
| 1905                        | 13,211.32        | 12,604                | 13,211                 |                         |              |                   |
| 1906                        | 5,826.89         | 5,549                 | 5,827                  |                         |              |                   |
| 1907                        | 4,318.72         | 4,105                 | 4,319                  |                         |              |                   |
| 1908                        | 5,084.82         | 4,824                 | 5,085                  |                         |              |                   |
| 1909                        | 5,578.23         | 5,283                 | 5,578                  |                         |              |                   |
| 1910                        | 944.58           | 893                   | 945                    |                         |              |                   |
| 1911                        | 1,805.52         | 1,703                 | 1,806                  |                         |              |                   |
| 1912                        | 1,590.08         | 1,497                 | 1,590                  |                         |              |                   |
| 1913                        | 4,199.64         | 3,945                 | 4,200                  |                         |              |                   |
| 1914                        | 6,522.34         | 6,113                 | 6,522                  |                         |              |                   |
| 1915                        | 9,299.36         | 8,696                 | 9,299                  |                         |              |                   |
| 1916                        | 2,133.53         | 1,990                 | 2,134                  |                         |              |                   |
| 1917                        | 2,947.27         | 2,743                 | 2,943                  | 4                       | 5.54         | 1                 |
| 1918                        | 969.85           | 901                   | 967                    | 3                       | 5.72         | 1                 |
| 1919                        | 713.16           | 660                   | 708                    | 5                       | 5.92         | 1                 |
| 1920                        | 1,116.43         | 1,031                 | 1,106                  | 10                      | 6.12         | 2                 |
| 1921                        | 2,386.50         | 2,198                 | 2,358                  | 28                      | 6.32         | 4                 |
| 1922                        | 5,478.84         | 5,032                 | 5,398                  | 81                      | 6.52         | 12                |
| 1923                        | 5,748.64         | 5,264                 | 5,647                  | 102                     | 6.74         | 15                |
| 1924                        | 2,962.36         | 2,704                 | 2,901                  | 61                      | 6.97         | 9                 |
| 1925                        | 8,085.67         | 7,359                 | 7,895                  | 191                     | 7.19         | 27                |

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, 2018

| YEAR<br>(1)                 | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 80-S4 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1926                        | 3,690.49                | 3,348                        | 3,592                         | 98                             | 7.43                | 13                       |
| 1927                        | 3,441.21                | 3,111                        | 3,338                         | 103                            | 7.68                | 13                       |
| 1928                        | 3,616.30                | 3,258                        | 3,495                         | 121                            | 7.93                | 15                       |
| 1929                        | 9,736.71                | 8,740                        | 9,376                         | 361                            | 8.19                | 44                       |
| 1930                        | 3,705.73                | 3,313                        | 3,554                         | 152                            | 8.47                | 18                       |
| 1931                        | 4,695.61                | 4,182                        | 4,487                         | 209                            | 8.75                | 24                       |
| 1932                        | 2,031.20                | 1,802                        | 1,933                         | 98                             | 9.04                | 11                       |
| 1933                        | 2,540.95                | 2,244                        | 2,407                         | 134                            | 9.34                | 14                       |
| 1934                        | 4,020.82                | 3,535                        | 3,792                         | 229                            | 9.66                | 24                       |
| 1935                        | 866.62                  | 759                          | 814                           | 53                             | 9.98                | 5                        |
| 1936                        | 4,994.63                | 4,350                        | 4,667                         | 328                            | 10.32               | 32                       |
| 1937                        | 3,607.79                | 3,127                        | 3,355                         | 253                            | 10.67               | 24                       |
| 1938                        | 1,245.49                | 1,074                        | 1,152                         | 93                             | 11.03               | 8                        |
| 1939                        | 956.06                  | 820                          | 880                           | 76                             | 11.41               | 7                        |
| 1940                        | 13,850.45               | 11,808                       | 12,668                        | 1,182                          | 11.80               | 100                      |
| 1941                        | 4,887.61                | 4,142                        | 4,444                         | 444                            | 12.21               | 36                       |
| 1942                        | 8,169.68                | 6,880                        | 7,381                         | 789                            | 12.63               | 62                       |
| 1943                        | 1,693.42                | 1,417                        | 1,520                         | 173                            | 13.06               | 13                       |
| 1944                        | 3,627.62                | 3,015                        | 3,235                         | 393                            | 13.52               | 29                       |
| 1945                        | 1,007.81                | 832                          | 893                           | 115                            | 13.99               | 8                        |
| 1946                        | 623.85                  | 511                          | 548                           | 76                             | 14.48               | 5                        |
| 1947                        | 215.02                  | 175                          | 188                           | 27                             | 14.98               | 2                        |
| 1948                        | 3,109.38                | 2,507                        | 2,690                         | 419                            | 15.50               | 27                       |
| 1949                        | 16,198.32               | 12,949                       | 13,892                        | 2,306                          | 16.05               | 144                      |
| 1950                        | 20,944.17               | 16,596                       | 17,805                        | 3,139                          | 16.61               | 189                      |
| 1951                        | 11,956.42               | 9,387                        | 10,071                        | 1,885                          | 17.19               | 110                      |
| 1952                        | 8,038.39                | 6,251                        | 6,706                         | 1,332                          | 17.79               | 75                       |
| 1953                        | 5,949.87                | 4,580                        | 4,914                         | 1,036                          | 18.42               | 56                       |
| 1954                        | 21,585.01               | 16,442                       | 17,639                        | 3,946                          | 19.06               | 207                      |
| 1955                        | 32,149.56               | 24,225                       | 25,989                        | 6,161                          | 19.72               | 312                      |
| 1956                        | 51,558.51               | 38,405                       | 41,202                        | 10,357                         | 20.41               | 507                      |
| 1957                        | 19,916.61               | 14,661                       | 15,729                        | 4,188                          | 21.11               | 198                      |
| 1958                        | 63,499.25               | 46,164                       | 49,526                        | 13,973                         | 21.84               | 640                      |
| 1959                        | 28,371.09               | 20,363                       | 21,846                        | 6,525                          | 22.58               | 289                      |
| 1960                        | 26,305.63               | 18,628                       | 19,985                        | 6,321                          | 23.35               | 271                      |
| 1961                        | 15,768.03               | 11,012                       | 11,814                        | 3,954                          | 24.13               | 164                      |
| 1962                        | 18,087.78               | 12,451                       | 13,358                        | 4,730                          | 24.93               | 190                      |
| 1963                        | 27,374.57               | 18,563                       | 19,915                        | 7,460                          | 25.75               | 290                      |
| 1964                        | 40,027.79               | 26,723                       | 28,669                        | 11,359                         | 26.59               | 427                      |
| 1965                        | 17,574.04               | 11,544                       | 12,385                        | 5,189                          | 27.45               | 189                      |
| 1966                        | 18,597.25               | 12,014                       | 12,889                        | 5,708                          | 28.32               | 202                      |
| 1967                        | 96,910.77               | 61,538                       | 66,019                        | 30,892                         | 29.20               | 1,058                    |
| 1968                        | 82,637.79               | 51,545                       | 55,298                        | 27,340                         | 30.10               | 908                      |

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, 2018

| YEAR<br>(1)                 | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 80-S4 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1969                        | 46,057.56               | 28,199                       | 30,252                        | 15,806                         | 31.02               | 510                      |
| 1970                        | 45,097.36               | 27,092                       | 29,065                        | 16,032                         | 31.94               | 502                      |
| 1971                        | 54,600.87               | 32,166                       | 34,508                        | 20,093                         | 32.87               | 611                      |
| 1972                        | 80,822.88               | 46,655                       | 50,052                        | 30,771                         | 33.82               | 910                      |
| 1973                        | 31,060.02               | 17,561                       | 18,840                        | 12,220                         | 34.77               | 351                      |
| 1974                        | 42,716.26               | 23,638                       | 25,359                        | 17,357                         | 35.73               | 486                      |
| 1975                        | 53,203.52               | 28,796                       | 30,893                        | 22,311                         | 36.70               | 608                      |
| 1976                        | 46,796.87               | 25,607                       | 27,472                        | 19,325                         | 35.10               | 551                      |
| 1977                        | 50,016.13               | 26,724                       | 28,670                        | 21,346                         | 36.10               | 591                      |
| 1978                        | 27,600.77               | 14,391                       | 15,439                        | 12,162                         | 37.10               | 328                      |
| 1979                        | 28,400.77               | 14,442                       | 15,494                        | 12,907                         | 38.10               | 339                      |
| 1980                        | 24,054.08               | 11,921                       | 12,789                        | 11,265                         | 39.10               | 288                      |
| 1981                        | 55,235.53               | 26,662                       | 28,604                        | 26,632                         | 40.10               | 664                      |
| 1982                        | 47,534.94               | 22,332                       | 23,958                        | 23,577                         | 41.10               | 574                      |
| 1983                        | 27,148.25               | 12,404                       | 13,307                        | 13,841                         | 42.10               | 329                      |
| 1984                        | 30,306.87               | 13,456                       | 14,436                        | 15,871                         | 43.10               | 368                      |
| 1985                        | 72,105.59               | 31,085                       | 33,349                        | 38,757                         | 44.10               | 879                      |
| 1986                        | 17,533.91               | 7,333                        | 7,867                         | 9,667                          | 45.10               | 214                      |
| 1987                        | 27,416.83               | 11,112                       | 11,921                        | 15,496                         | 46.10               | 336                      |
| 1988                        | 11,339.22               | 4,450                        | 4,774                         | 6,565                          | 47.10               | 139                      |
| 1989                        | 70,100.72               | 26,603                       | 28,540                        | 41,561                         | 48.10               | 864                      |
| 1990                        | 44,760.66               | 16,409                       | 17,604                        | 27,157                         | 49.10               | 553                      |
| 1991                        | 35,224.46               | 12,459                       | 13,366                        | 21,858                         | 50.10               | 436                      |
| 1992                        | 54,141.31               | 18,451                       | 19,795                        | 34,346                         | 51.10               | 672                      |
| 1993                        | 58,993.43               | 19,344                       | 20,753                        | 38,240                         | 52.10               | 734                      |
| 1994                        | 184,531.84              | 58,128                       | 62,361                        | 122,171                        | 53.10               | 2,301                    |
| 1995                        | 584,928.49              | 176,707                      | 189,575                       | 395,353                        | 54.10               | 7,308                    |
| 1996                        | 126,940.88              | 36,711                       | 39,384                        | 87,557                         | 55.10               | 1,589                    |
| 1997                        | 68,030.65               | 18,797                       | 20,166                        | 47,865                         | 56.10               | 853                      |
| 1998                        | 40,132.45               | 10,571                       | 11,341                        | 28,791                         | 57.10               | 504                      |
| 2000                        | 15,568.19               | 3,699                        | 3,968                         | 11,600                         | 59.10               | 196                      |
| 2001                        | 39,714.12               | 8,924                        | 9,574                         | 30,140                         | 60.10               | 501                      |
| 2002                        | 181,571.19              | 38,457                       | 41,257                        | 140,314                        | 61.10               | 2,296                    |
| 2003                        | 1,938.28                | 386                          | 414                           | 1,524                          | 62.10               | 25                       |
| 2006                        | 3,432.18                | 550                          | 590                           | 2,842                          | 65.10               | 44                       |
|                             | 3,239,641.11            | 1,572,572                    | 1,682,111                     | 1,557,530                      |                     | 35,486                   |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 43.9 1.10

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, 2018

| YEAR<br>(1)                 | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 60-R1 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1925                        | 145.13                  | 124                          | 107                           | 38                             | 8.60                | 4                        |
| 1927                        | 190.39                  | 161                          | 139                           | 51                             | 9.27                | 6                        |
| 1928                        | 480.60                  | 404                          | 349                           | 132                            | 9.60                | 14                       |
| 1929                        | 3,633.86                | 3,031                        | 2,618                         | 1,016                          | 9.95                | 102                      |
| 1930                        | 4,190.74                | 3,472                        | 2,999                         | 1,192                          | 10.29               | 116                      |
| 1931                        | 1,082.29                | 890                          | 769                           | 313                            | 10.64               | 29                       |
| 1932                        | 2,052.35                | 1,676                        | 1,448                         | 604                            | 11.00               | 55                       |
| 1933                        | 4,696.27                | 3,808                        | 3,290                         | 1,406                          | 11.35               | 124                      |
| 1934                        | 1,831.68                | 1,474                        | 1,273                         | 559                            | 11.72               | 48                       |
| 1935                        | 87.62                   | 70                           | 60                            | 28                             | 12.08               | 2                        |
| 1936                        | 2,220.31                | 1,759                        | 1,520                         | 700                            | 12.46               | 56                       |
| 1938                        | 566.04                  | 441                          | 381                           | 185                            | 13.21               | 14                       |
| 1939                        | 7,201.73                | 5,569                        | 4,811                         | 2,391                          | 13.60               | 176                      |
| 1940                        | 511.47                  | 392                          | 339                           | 172                            | 13.99               | 12                       |
| 1941                        | 831.30                  | 632                          | 546                           | 285                            | 14.38               | 20                       |
| 1942                        | 108.01                  | 81                           | 70                            | 38                             | 14.78               | 3                        |
| 1943                        | 648.31                  | 484                          | 418                           | 230                            | 15.18               | 15                       |
| 1945                        | 599.97                  | 440                          | 380                           | 220                            | 16.00               | 14                       |
| 1946                        | 963.68                  | 700                          | 605                           | 359                            | 16.42               | 22                       |
| 1947                        | 2,612.95                | 1,880                        | 1,624                         | 989                            | 16.84               | 59                       |
| 1948                        | 6,348.90                | 4,521                        | 3,906                         | 2,443                          | 17.27               | 141                      |
| 1949                        | 1,096.18                | 773                          | 668                           | 428                            | 17.70               | 24                       |
| 1950                        | 4,788.74                | 3,341                        | 2,886                         | 1,903                          | 18.14               | 105                      |
| 1951                        | 11,737.18               | 8,103                        | 7,000                         | 4,737                          | 18.58               | 255                      |
| 1952                        | 31,184.44               | 21,294                       | 18,395                        | 12,789                         | 19.03               | 672                      |
| 1953                        | 27,638.06               | 18,665                       | 16,124                        | 11,514                         | 19.48               | 591                      |
| 1954                        | 16,714.68               | 11,160                       | 9,641                         | 7,074                          | 19.94               | 355                      |
| 1955                        | 15,126.63               | 9,981                        | 8,622                         | 6,505                          | 20.41               | 319                      |
| 1956                        | 37,835.50               | 24,669                       | 21,311                        | 16,524                         | 20.88               | 791                      |
| 1957                        | 79,545.10               | 51,241                       | 44,265                        | 35,280                         | 21.35               | 1,652                    |
| 1958                        | 61,803.62               | 39,318                       | 33,965                        | 27,839                         | 21.83               | 1,275                    |
| 1959                        | 39,907.92               | 25,062                       | 21,650                        | 18,258                         | 22.32               | 818                      |
| 1960                        | 109,237.35              | 67,709                       | 58,491                        | 50,746                         | 22.81               | 2,225                    |
| 1961                        | 55,708.75               | 34,066                       | 29,428                        | 26,281                         | 23.31               | 1,127                    |
| 1962                        | 91,828.30               | 55,388                       | 47,848                        | 43,980                         | 23.81               | 1,847                    |
| 1963                        | 32,281.68               | 19,197                       | 16,584                        | 15,698                         | 24.32               | 645                      |
| 1964                        | 46,069.04               | 26,996                       | 23,321                        | 22,748                         | 24.84               | 916                      |
| 1965                        | 28,453.29               | 16,427                       | 14,191                        | 14,262                         | 25.36               | 562                      |
| 1966                        | 26,472.24               | 15,049                       | 13,000                        | 13,472                         | 25.89               | 520                      |
| 1967                        | 24,611.96               | 13,775                       | 11,900                        | 12,712                         | 26.42               | 481                      |
| 1968                        | 8,268.76                | 4,553                        | 3,933                         | 4,336                          | 26.96               | 161                      |
| 1969                        | 17,835.22               | 9,661                        | 8,346                         | 9,489                          | 27.50               | 345                      |
| 1970                        | 5,788.97                | 3,083                        | 2,663                         | 3,126                          | 28.05               | 111                      |

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, 2018

| YEAR<br>(1)                 | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 60-R1 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1971                        | 36,128.89               | 18,902                       | 16,329                        | 19,800                         | 28.61               | 692                      |
| 1972                        | 11,669.66               | 5,996                        | 5,180                         | 6,490                          | 29.17               | 222                      |
| 1973                        | 13,101.02               | 6,607                        | 5,708                         | 7,393                          | 29.74               | 249                      |
| 1974                        | 12,357.86               | 6,115                        | 5,283                         | 7,075                          | 30.31               | 233                      |
| 1975                        | 16,547.92               | 8,029                        | 6,936                         | 9,612                          | 30.89               | 311                      |
| 1976                        | 25,833.16               | 15,779                       | 13,631                        | 12,202                         | 27.03               | 451                      |
| 1977                        | 22,170.60               | 13,313                       | 11,501                        | 10,670                         | 27.55               | 387                      |
| 1978                        | 34,806.44               | 20,679                       | 17,864                        | 16,942                         | 27.61               | 614                      |
| 1979                        | 36,918.99               | 21,539                       | 18,607                        | 18,312                         | 28.15               | 651                      |
| 1980                        | 27,349.61               | 15,655                       | 13,524                        | 13,826                         | 28.70               | 482                      |
| 1981                        | 27,279.16               | 15,413                       | 13,315                        | 13,964                         | 28.81               | 485                      |
| 1982                        | 41,214.98               | 22,812                       | 19,706                        | 21,509                         | 29.38               | 732                      |
| 1983                        | 29,410.54               | 15,938                       | 13,768                        | 15,643                         | 29.94               | 522                      |
| 1984                        | 18,504.68               | 9,872                        | 8,528                         | 9,977                          | 30.10               | 331                      |
| 1985                        | 12,622.86               | 6,580                        | 5,684                         | 6,939                          | 30.69               | 226                      |
| 1986                        | 26,055.08               | 13,259                       | 11,454                        | 14,601                         | 31.28               | 467                      |
| 1987                        | 3,231.92                | 1,614                        | 1,394                         | 1,838                          | 31.48               | 58                       |
| 1988                        | 28,967.99               | 14,099                       | 12,180                        | 16,788                         | 32.08               | 523                      |
| 1989                        | 30,285.43               | 14,434                       | 12,469                        | 17,816                         | 32.31               | 551                      |
| 1990                        | 18,275.56               | 8,516                        | 7,357                         | 10,919                         | 32.56               | 335                      |
| 1991                        | 35,390.89               | 16,011                       | 13,831                        | 21,560                         | 33.19               | 650                      |
| 1992                        | 128.43                  | 57                           | 49                            | 79                             | 33.46               | 2                        |
| 1993                        | 23,267.40               | 9,993                        | 8,633                         | 14,634                         | 33.76               | 433                      |
| 1994                        | 1,497.52                | 622                          | 537                           | 961                            | 34.41               | 28                       |
| 1995                        | 13,474.74               | 5,428                        | 4,689                         | 8,786                          | 34.72               | 253                      |
| 1996                        | 50,149.39               | 19,558                       | 16,895                        | 33,254                         | 35.06               | 948                      |
| 1997                        | 20,403.68               | 7,690                        | 6,643                         | 13,761                         | 35.40               | 389                      |
| 1998                        | 63,449.18               | 23,057                       | 19,918                        | 43,531                         | 35.76               | 1,217                    |
| 1999                        | 2,529.39                | 889                          | 768                           | 1,761                          | 35.83               | 49                       |
| 2000                        | 27,901.29               | 9,403                        | 8,123                         | 19,778                         | 36.23               | 546                      |
| 2001                        | 26,662.40               | 8,639                        | 7,463                         | 19,199                         | 36.34               | 528                      |
| 2002                        | 34,679.05               | 10,702                       | 9,245                         | 25,434                         | 36.78               | 692                      |
| 2003                        | 62,160.05               | 18,306                       | 15,814                        | 46,346                         | 36.94               | 1,255                    |
| 2004                        | 34,929.38               | 9,770                        | 8,440                         | 26,489                         | 37.13               | 713                      |
| 2005                        | 51,957.23               | 13,732                       | 11,863                        | 40,094                         | 37.35               | 1,073                    |
| 2006                        | 81,258.38               | 20,282                       | 17,521                        | 63,737                         | 37.33               | 1,707                    |
| 2007                        | 189,357.30              | 44,101                       | 38,097                        | 151,260                        | 37.60               | 4,023                    |
| 2008                        | 465,600.61              | 100,896                      | 87,160                        | 378,441                        | 37.66               | 10,049                   |
| 2009                        | 102,734.74              | 20,609                       | 17,803                        | 84,932                         | 37.53               | 2,263                    |
| 2010                        | 174,054.48              | 31,939                       | 27,591                        | 146,463                        | 37.45               | 3,911                    |
| 2011                        | 203,636.88              | 33,682                       | 29,096                        | 174,541                        | 37.43               | 4,663                    |
| 2012                        | 577,965.39              | 84,903                       | 73,344                        | 504,621                        | 37.25               | 13,547                   |
| 2013                        | 237,541.60              | 30,500                       | 26,348                        | 211,194                        | 36.78               | 5,742                    |

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, 2018

| YEAR<br>(1)                                                  | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|--------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 60-R1                                  |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                      |                         |                              |                               |                                |                     |                          |
| 2014                                                         | 391,754.99              | 42,545                       | 36,753                        | 355,002                        | 36.24               | 9,796                    |
| 2015                                                         | 918,399.95              | 80,636                       | 69,658                        | 848,742                        | 35.49               | 23,915                   |
| 2016                                                         | 391,473.85              | 25,720                       | 22,219                        | 369,255                        | 34.35               | 10,750                   |
| 2017                                                         | 200,096.64              | 8,584                        | 7,415                         | 192,682                        | 32.55               | 5,920                    |
|                                                              | 5,670,124.39            | 1,444,925                    | 1,248,218                     | 4,421,906                      |                     | 130,413                  |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. |                         |                              |                               |                                |                     | 33.9 2.30                |

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, 2018

| YEAR                        | ORIGINAL<br>COST | CALCULATED<br>ACCRUED | ALLOC. BOOK<br>RESERVE | FUTURE BOOK<br>ACCRUALS | REM.<br>LIFE | ANNUAL<br>ACCRUAL |
|-----------------------------|------------------|-----------------------|------------------------|-------------------------|--------------|-------------------|
| (1)                         | (2)              | (3)                   | (4)                    | (5)                     | (6)          | (7)               |
| SURVIVOR CURVE.. IOWA 55-R1 |                  |                       |                        |                         |              |                   |
| NET SALVAGE PERCENT.. 0     |                  |                       |                        |                         |              |                   |
| 1922                        | 114.31           | 105                   | 114                    |                         |              |                   |
| 1928                        | 87.15            | 77                    | 87                     |                         |              |                   |
| 1930                        | 127.57           | 111                   | 128                    |                         |              |                   |
| 1931                        | 263.40           | 228                   | 263                    |                         |              |                   |
| 1934                        | 783.68           | 666                   | 784                    |                         |              |                   |
| 1935                        | 147.25           | 124                   | 147                    |                         |              |                   |
| 1936                        | 21.46            | 18                    | 21                     |                         |              |                   |
| 1937                        | 618.76           | 514                   | 619                    |                         |              |                   |
| 1938                        | 1,463.03         | 1,206                 | 1,463                  |                         |              |                   |
| 1940                        | 440.04           | 357                   | 440                    |                         |              |                   |
| 1942                        | 1,018.37         | 813                   | 1,018                  |                         |              |                   |
| 1944                        | 2,850.41         | 2,237                 | 2,850                  |                         |              |                   |
| 1946                        | 377.07           | 291                   | 377                    |                         |              |                   |
| 1947                        | 568.77           | 434                   | 569                    |                         |              |                   |
| 1948                        | 482.71           | 365                   | 479                    | 4                       | 13.40        |                   |
| 1950                        | 1,857.60         | 1,378                 | 1,809                  | 49                      | 14.21        | 3                 |
| 1951                        | 3,131.90         | 2,299                 | 3,019                  | 113                     | 14.62        | 8                 |
| 1952                        | 3,969.07         | 2,884                 | 3,787                  | 182                     | 15.04        | 12                |
| 1953                        | 4,259.74         | 3,062                 | 4,021                  | 239                     | 15.46        | 15                |
| 1955                        | 4,904.63         | 3,449                 | 4,529                  | 376                     | 16.32        | 23                |
| 1956                        | 2,507.83         | 1,744                 | 2,290                  | 218                     | 16.76        | 13                |
| 1957                        | 14,375.38        | 9,880                 | 12,973                 | 1,402                   | 17.20        | 82                |
| 1958                        | 1,667.93         | 1,133                 | 1,488                  | 180                     | 17.65        | 10                |
| 1959                        | 5,902.55         | 3,959                 | 5,198                  | 705                     | 18.11        | 39                |
| 1960                        | 1,345.00         | 891                   | 1,170                  | 175                     | 18.57        | 9                 |
| 1961                        | 1,954.81         | 1,278                 | 1,678                  | 277                     | 19.04        | 15                |
| 1963                        | 3,416.99         | 2,174                 | 2,855                  | 562                     | 20.00        | 28                |
| 1964                        | 1,441.97         | 905                   | 1,188                  | 254                     | 20.48        | 12                |
| 1967                        | 1,614.49         | 969                   | 1,272                  | 342                     | 21.98        | 16                |
| 1970                        | 2,450.11         | 1,402                 | 1,841                  | 609                     | 23.53        | 26                |
| 1971                        | 7,721.50         | 4,344                 | 5,704                  | 2,018                   | 24.06        | 84                |
| 1972                        | 1.00             | 1                     | 1                      |                         |              |                   |
| 1980                        | 3,885.67         | 2,359                 | 3,098                  | 788                     | 24.87        | 32                |
| 1988                        | 11,897.69        | 6,152                 | 8,078                  | 3,820                   | 28.41        | 134               |
|                             | 87,669.84        | 57,809                | 75,358                 | 12,312                  |              | 561               |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 21.9 0.64

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, 2018

| YEAR<br>(1)                           | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|---------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| GETTYSBURG GARAGE                     |                         |                              |                               |                                |                     |                          |
| FULLY ACCRUED                         |                         |                              |                               |                                |                     |                          |
| 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-R1.5 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 6-2033     |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0               |                         |                              |                               |                                |                     |                          |
| 1958                                  | 23,203.80               | 18,370                       | 21,318                        | 1,885                          | 13.64               | 138                      |
| 1959                                  | 530.28                  | 418                          | 485                           | 45                             | 13.66               | 3                        |
| 1978                                  | 1,767.28                | 1,314                        | 1,525                         | 242                            | 13.93               | 17                       |
| 1985                                  | 19,951.17               | 14,068                       | 16,326                        | 3,625                          | 13.98               | 259                      |
| 1987                                  | 7,647.96                | 5,286                        | 6,134                         | 1,514                          | 14.04               | 108                      |
| 1995                                  | 8,147.09                | 5,094                        | 5,912                         | 2,236                          | 14.04               | 159                      |
| 1998                                  | 14,593.54               | 8,641                        | 10,028                        | 4,566                          | 14.07               | 325                      |
| 1999                                  | 5,204.23                | 3,011                        | 3,494                         | 1,710                          | 14.14               | 121                      |
| 2003                                  | 17,099.66               | 8,936                        | 10,370                        | 6,729                          | 14.08               | 478                      |
| 2007                                  | 4,558.44                | 2,040                        | 2,367                         | 2,191                          | 14.09               | 156                      |
| 2010                                  | 1,391.88                | 520                          | 603                           | 788                            | 14.11               | 56                       |
| 2012                                  | 15,971.90               | 5,001                        | 5,804                         | 10,168                         | 14.08               | 722                      |
| 2014                                  | 1,825.22                | 437                          | 507                           | 1,318                          | 14.03               | 94                       |
| 2015                                  | 221,738.88              | 43,572                       | 50,565                        | 171,174                        | 13.97               | 12,253                   |
| 2016                                  | 74,700.89               | 11,063                       | 12,839                        | 61,862                         | 13.90               | 4,451                    |
| 2018                                  | 135,563.00              | 4,094                        | 4,751                         | 130,812                        | 13.40               | 9,762                    |
|                                       | 553,895.22              | 131,865                      | 153,029                       | 400,866                        |                     | 29,102                   |

WASHINGTON SERVICE CENTER  
INTERIM SURVIVOR CURVE.. IOWA 90-R1.5  
PROBABLE RETIREMENT YEAR.. 6-2030  
NET SALVAGE PERCENT.. 0

|      |          |       |       |     |       |    |
|------|----------|-------|-------|-----|-------|----|
| 1928 | 539.04   | 470   | 539   |     |       |    |
| 1933 | 401.96   | 348   | 402   |     |       |    |
| 1937 | 77.17    | 66    | 77    | 1   | 10.57 |    |
| 1955 | 8,925.95 | 7,433 | 8,626 | 300 | 10.95 | 27 |



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, 2018

| YEAR<br>(1)                           | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|---------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| WASHINGTON SERVICE CENTER             |                         |                              |                               |                                |                     |                          |
| INTERIM SURVIVOR CURVE.. IOWA 90-R1.5 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 6-2030     |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0               |                         |                              |                               |                                |                     |                          |
| 1957                                  | 17,943.97               | 14,871                       | 17,258                        | 686                            | 10.98               | 62                       |
| 1958                                  | 1,091.86                | 902                          | 1,047                         | 45                             | 11.00               | 4                        |
| 1962                                  | 275.80                  | 226                          | 262                           | 14                             | 11.05               | 1                        |
| 1963                                  | 17,141.83               | 13,972                       | 16,215                        | 927                            | 11.07               | 84                       |
| 1964                                  | 81,035.39               | 65,851                       | 76,421                        | 4,615                          | 11.08               | 417                      |
| 1965                                  | 2,232.00                | 1,808                        | 2,098                         | 134                            | 11.09               | 12                       |
| 1968                                  | 462.64                  | 371                          | 431                           | 32                             | 11.13               | 3                        |
| 1969                                  | 861.74                  | 688                          | 798                           | 63                             | 11.14               | 6                        |
| 1973                                  | 1,166.63                | 917                          | 1,064                         | 102                            | 11.18               | 9                        |
| 1976                                  | 1,998.47                | 1,585                        | 1,839                         | 159                            | 11.06               | 14                       |
| 1978                                  | 1,705.03                | 1,337                        | 1,552                         | 153                            | 11.13               | 14                       |
| 1982                                  | 1,111.41                | 850                          | 986                           | 125                            | 11.20               | 11                       |
| 1984                                  | 4,760.67                | 3,588                        | 4,164                         | 597                            | 11.25               | 53                       |
| 1985                                  | 911.17                  | 682                          | 791                           | 120                            | 11.23               | 11                       |
| 1987                                  | 180,447.17              | 132,665                      | 153,959                       | 26,488                         | 11.32               | 2,340                    |
| 1995                                  | 194,747.16              | 131,337                      | 152,418                       | 42,330                         | 11.31               | 3,743                    |
| 1996                                  | 41,750.41               | 27,797                       | 32,259                        | 9,492                          | 11.25               | 844                      |
| 1997                                  | 51,204.74               | 33,560                       | 38,947                        | 12,258                         | 11.26               | 1,089                    |
| 1998                                  | 27,872.99               | 17,925                       | 20,802                        | 7,071                          | 11.33               | 624                      |
| 2005                                  | 152,784.63              | 83,023                       | 96,349                        | 56,436                         | 11.27               | 5,008                    |
| 2006                                  | 8,853.44                | 4,639                        | 5,384                         | 3,470                          | 11.28               | 308                      |
| 2008                                  | 7,810.00                | 3,743                        | 4,344                         | 3,466                          | 11.32               | 306                      |
| 2010                                  | 86,191.80               | 36,778                       | 42,681                        | 43,511                         | 11.31               | 3,847                    |
| 2011                                  | 15,761.85               | 6,254                        | 7,258                         | 8,504                          | 11.27               | 755                      |
| 2013                                  | 102,652.64              | 33,311                       | 38,658                        | 63,995                         | 11.28               | 5,673                    |
| 2015                                  | 29,890.28               | 6,976                        | 8,096                         | 21,795                         | 11.22               | 1,943                    |
| 2016                                  | 11,433.54               | 2,031                        | 2,357                         | 9,077                          | 11.19               | 811                      |
| 2017                                  | 121,873.14              | 14,125                       | 16,392                        | 105,481                        | 11.12               | 9,486                    |
| 2018                                  | 135,563.00              | 5,002                        | 5,805                         | 129,758                        | 10.87               | 11,937                   |
|                                       | 1,311,479.52            | 655,131                      | 760,276                       | 551,204                        |                     | 49,442                   |

BRADFORD OFFICE  
FULLY ACCRUED  
NET SALVAGE PERCENT.. 0

|      |           |        |        |
|------|-----------|--------|--------|
| 1958 | 20,999.60 | 21,000 | 21,000 |
| 1959 | 135.56    | 136    | 136    |
| 1960 | 720.61    | 721    | 721    |

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, 2018

| YEAR<br>(1)                           | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|---------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| BRADFORD OFFICE                       |                         |                              |                               |                                |                     |                          |
| FULLY ACCRUED                         |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0               |                         |                              |                               |                                |                     |                          |
| 1964                                  | 300.54                  | 301                          | 301                           |                                |                     |                          |
| 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                        |                                |                     |                          |
| HANOVER SERVICE CENTER                |                         |                              |                               |                                |                     |                          |
| INTERIM SURVIVOR CURVE.. IOWA 90-R1.5 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 6-2029     |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0               |                         |                              |                               |                                |                     |                          |
| 1939                                  | 1,201.91                | 1,044                        | 1,202                         |                                |                     |                          |
| 1949                                  | 338.10                  | 289                          | 337                           | 1                              | 9.97                |                          |
| 1979                                  | 85,249.40               | 67,543                       | 78,753                        | 6,496                          | 10.33               | 629                      |
| 1983                                  | 5,480.40                | 4,251                        | 4,957                         | 524                            | 10.25               | 51                       |
| 1991                                  | 1,625.41                | 1,181                        | 1,377                         | 248                            | 10.32               | 24                       |
| 1992                                  | 3,087.69                | 2,219                        | 2,587                         | 500                            | 10.35               | 48                       |
| 1998                                  | 249,117.92              | 165,290                      | 192,723                       | 56,395                         | 10.35               | 5,449                    |
| 2000                                  | 1,971.28                | 1,263                        | 1,473                         | 499                            | 10.32               | 48                       |
| 2007                                  | 8,637.28                | 4,526                        | 5,277                         | 3,360                          | 10.37               | 324                      |
| 2009                                  | 8,908.99                | 4,245                        | 4,950                         | 3,959                          | 10.35               | 383                      |
| 2013                                  | 76,855.87               | 26,438                       | 30,826                        | 46,030                         | 10.33               | 4,456                    |
| 2014                                  | 4,037.54                | 1,211                        | 1,412                         | 2,626                          | 10.31               | 255                      |
| 2015                                  | 4,344.34                | 1,082                        | 1,262                         | 3,083                          | 10.30               | 299                      |
| 2016                                  | 18,864.29               | 3,592                        | 4,188                         | 14,676                         | 10.27               | 1,429                    |
|                                       | 469,720.42              | 284,174                      | 331,323                       | 138,397                        |                     | 13,395                   |

JEANNETTE SERVICE CENTER AND SHOP  
INTERIM SURVIVOR CURVE.. IOWA 90-R1.5  
PROBABLE RETIREMENT YEAR.. 6-2056  
NET SALVAGE PERCENT.. 0

|      |            |         |         |         |       |       |
|------|------------|---------|---------|---------|-------|-------|
| 1981 | 570,645.77 | 307,464 | 358,476 | 212,169 | 32.03 | 6,624 |
| 1986 | 14,116.67  | 7,094   | 8,271   | 5,846   | 32.10 | 182   |
| 1987 | 10,407.11  | 5,133   | 5,985   | 4,422   | 32.28 | 137   |
| 1988 | 9,927.13   | 4,801   | 5,598   | 4,330   | 32.48 | 133   |
| 1996 | 15,657.03  | 6,352   | 7,406   | 8,251   | 32.83 | 251   |
| 1997 | 7,811.92   | 3,079   | 3,590   | 4,222   | 32.93 | 128   |

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, 2018

| YEAR<br>(1)                           | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|---------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| JEANNETTE SERVICE CENTER AND SHOP     |                         |                              |                               |                                |                     |                          |
| INTERIM SURVIVOR CURVE.. IOWA 90-R1.5 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 6-2056     |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0               |                         |                              |                               |                                |                     |                          |
| 1998                                  | 1,279.74                | 489                          | 570                           | 710                            | 33.06               | 21                       |
| 2000                                  | 2,022.62                | 726                          | 846                           | 1,176                          | 32.87               | 36                       |
| 2003                                  | 23,740.42               | 7,540                        | 8,791                         | 14,949                         | 33.13               | 451                      |
| 2006                                  | 121,405.26              | 33,168                       | 38,671                        | 82,734                         | 33.04               | 2,504                    |
| 2007                                  | 83,014.55               | 21,326                       | 24,864                        | 58,150                         | 33.03               | 1,761                    |
| 2009                                  | 23,077.21               | 5,128                        | 5,979                         | 17,098                         | 32.96               | 519                      |
| 2010                                  | 4,246.98                | 869                          | 1,013                         | 3,234                          | 32.74               | 99                       |
| 2013                                  | 781,378.92              | 111,737                      | 130,276                       | 651,103                        | 32.46               | 20,059                   |
| 2015                                  | 1,033,908.69            | 99,979                       | 116,567                       | 917,342                        | 31.92               | 28,739                   |
| 2016                                  | 79,241.15               | 5,650                        | 6,587                         | 72,654                         | 31.48               | 2,308                    |
| 2018                                  | 406,681.00              | 5,816                        | 6,781                         | 399,900                        | 28.74               | 13,914                   |
|                                       | 3,188,562.17            | 626,351                      | 730,271                       | 2,458,291                      |                     | 77,866                   |

OTHER BUILDINGS

SURVIVOR CURVE.. IOWA 35-R2  
NET SALVAGE PERCENT.. 0

|      |           |        |        |       |       |     |
|------|-----------|--------|--------|-------|-------|-----|
| 1948 | 48.26     | 48     | 48     |       |       |     |
| 1950 | 27.73     | 28     | 28     |       |       |     |
| 1951 | 53.50     | 54     | 54     |       |       |     |
| 1953 | 1,757.60  | 1,758  | 1,758  |       |       |     |
| 1954 | 1,616.10  | 1,607  | 1,616  |       |       |     |
| 1955 | 5,238.56  | 5,177  | 5,239  |       |       |     |
| 1956 | 226.13    | 222    | 226    |       |       |     |
| 1961 | 4,948.95  | 4,662  | 4,949  |       |       |     |
| 1966 | 1,872.11  | 1,687  | 1,872  |       |       |     |
| 1969 | 1,139.37  | 998    | 1,139  |       |       |     |
| 1971 | 97,693.21 | 83,876 | 97,693 |       |       |     |
| 1972 | 8,602.65  | 7,310  | 8,547  | 55    | 5.26  | 10  |
| 1975 | 5,430.28  | 4,461  | 5,216  | 214   | 6.25  | 34  |
| 1976 | 6,320.42  | 5,523  | 6,320  |       |       |     |
| 1984 | 41,587.06 | 32,920 | 38,500 | 3,087 | 9.06  | 341 |
| 1985 | 3,157.55  | 2,458  | 2,875  | 283   | 9.50  | 30  |
| 1987 | 13,995.69 | 10,553 | 12,342 | 1,654 | 10.25 | 161 |
| 1988 | 14,516.05 | 10,729 | 12,548 | 1,968 | 10.74 | 183 |
| 1989 | 11,209.93 | 8,112  | 9,487  | 1,723 | 11.24 | 153 |
| 1990 | 31,562.41 | 22,334 | 26,120 | 5,443 | 11.74 | 464 |
| 1993 | 7,972.88  | 5,249  | 6,139  | 1,834 | 13.19 | 139 |

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, 2018

| YEAR<br>(1)                                                  | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|--------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| OTHER BUILDINGS                                              |                         |                              |                               |                                |                     |                          |
| SURVIVOR CURVE.. IOWA 35-R2                                  |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                      |                         |                              |                               |                                |                     |                          |
| 1994                                                         | 14,903.80               | 9,534                        | 11,150                        | 3,754                          | 13.75               | 273                      |
| 1995                                                         | 27,441.60               | 17,093                       | 19,990                        | 7,451                          | 14.18               | 525                      |
| 1996                                                         | 2,359.06                | 1,423                        | 1,664                         | 695                            | 14.76               | 47                       |
| 1997                                                         | 1,320.29                | 769                          | 899                           | 421                            | 15.35               | 27                       |
| 1998                                                         | 56,200.70               | 31,669                       | 37,037                        | 19,163                         | 15.82               | 1,211                    |
| 1999                                                         | 23,404.19               | 12,678                       | 14,827                        | 8,577                          | 16.43               | 522                      |
| 2000                                                         | 185,222.45              | 96,538                       | 112,902                       | 72,320                         | 16.92               | 4,274                    |
| 2001                                                         | 8,964.81                | 4,465                        | 5,222                         | 3,743                          | 17.55               | 213                      |
| 2003                                                         | 12,430.57               | 5,634                        | 6,589                         | 5,842                          | 18.60               | 314                      |
| 2006                                                         | 1,741.88                | 662                          | 774                           | 968                            | 20.26               | 48                       |
| 2007                                                         | 26,164.25               | 9,260                        | 10,830                        | 15,335                         | 20.84               | 736                      |
| 2008                                                         | 131,696.24              | 43,078                       | 50,380                        | 81,316                         | 21.43               | 3,794                    |
| 2009                                                         | 185,558.61              | 55,742                       | 65,191                        | 120,368                        | 21.93               | 5,489                    |
| 2010                                                         | 11,684.30               | 3,186                        | 3,726                         | 7,958                          | 22.45               | 354                      |
| 2011                                                         | 8,303.45                | 2,026                        | 2,369                         | 5,934                          | 22.98               | 258                      |
| 2012                                                         | 10,105.00               | 2,173                        | 2,541                         | 7,564                          | 23.43               | 323                      |
| 2013                                                         | 563,439.82              | 104,067                      | 121,708                       | 441,732                        | 23.91               | 18,475                   |
| 2014                                                         | 305,724.08              | 47,112                       | 55,098                        | 250,626                        | 24.24               | 10,339                   |
| 2015                                                         | 164,055.54              | 20,015                       | 23,408                        | 140,648                        | 24.59               | 5,720                    |
| 2016                                                         | 327,882.90              | 29,149                       | 34,090                        | 293,793                        | 24.76               | 11,866                   |
| 2017                                                         | 169,621.26              | 9,499                        | 11,109                        | 158,512                        | 24.58               | 6,449                    |
| 2018                                                         | 542,360.00              | 9,546                        | 11,164                        | 531,196                        | 23.28               | 22,818                   |
|                                                              | 3,039,561.24            | 725,084                      | 845,386                       | 2,194,175                      |                     | 95,590                   |
|                                                              | 8,621,582.79            | 2,480,970                    | 2,878,649                     | 5,742,933                      |                     | 265,395                  |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. |                         |                              |                               |                                |                     | 21.6 3.08                |

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, 2018

| YEAR<br>(1)                                                  | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|--------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 45-R3                                  |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                      |                         |                              |                               |                                |                     |                          |
| 2001                                                         | 16,515.17               | 6,760                        | 7,198                         | 9,317                          | 25.14               | 371                      |
|                                                              | 16,515.17               | 6,760                        | 7,198                         | 9,317                          |                     | 371                      |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. |                         |                              |                               |                                |                     | 25.1 2.25                |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.1 MAINS - CAST IRON

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR<br>(1)                         | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| INTERIM SURVIVOR CURVE.. IOWA 71-R1 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 12-2025  |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0             |                         |                              |                               |                                |                     |                          |
| 1908                                | 1.46                    | 1                            | 1                             |                                |                     |                          |
| 1911                                | 557.23                  | 512                          | 500                           | 57                             | 5.69                | 10                       |
| 1912                                | 47.18                   | 43                           | 42                            | 5                              | 5.74                | 1                        |
| 1913                                | 467.54                  | 429                          | 419                           | 49                             | 5.78                | 8                        |
| 1914                                | 88.78                   | 81                           | 79                            | 10                             | 5.82                | 2                        |
| 1915                                | 369.23                  | 338                          | 330                           | 39                             | 5.85                | 7                        |
| 1917                                | 855.83                  | 783                          | 764                           | 92                             | 5.93                | 16                       |
| 1918                                | 30.87                   | 28                           | 27                            | 4                              | 5.96                | 1                        |
| 1919                                | 31.43                   | 29                           | 28                            | 3                              | 5.99                | 1                        |
| 1920                                | 941.59                  | 860                          | 839                           | 103                            | 6.02                | 17                       |
| 1921                                | 14,563.43               | 13,284                       | 12,966                        | 1,597                          | 6.05                | 264                      |
| 1922                                | 317.18                  | 289                          | 282                           | 35                             | 6.08                | 6                        |
| 1923                                | 1,713.97                | 1,561                        | 1,524                         | 190                            | 6.11                | 31                       |
| 1924                                | 20,760.96               | 18,895                       | 18,443                        | 2,318                          | 6.14                | 378                      |
| 1925                                | 11,501.39               | 10,461                       | 10,211                        | 1,290                          | 6.16                | 209                      |
| 1926                                | 40,384.52               | 36,702                       | 35,824                        | 4,561                          | 6.19                | 737                      |
| 1927                                | 15,901.72               | 14,442                       | 14,097                        | 1,805                          | 6.21                | 291                      |
| 1928                                | 19,327.02               | 17,538                       | 17,119                        | 2,208                          | 6.24                | 354                      |
| 1929                                | 32,148.77               | 29,153                       | 28,456                        | 3,693                          | 6.26                | 590                      |
| 1930                                | 11,983.61               | 10,859                       | 10,599                        | 1,385                          | 6.28                | 221                      |
| 1931                                | 9,132.86                | 8,270                        | 8,072                         | 1,061                          | 6.30                | 168                      |
| 1932                                | 0.21                    |                              |                               |                                |                     |                          |
| 1933                                | 1,706.27                | 1,543                        | 1,506                         | 200                            | 6.34                | 32                       |
| 1934                                | 504.13                  | 455                          | 444                           | 60                             | 6.36                | 9                        |
| 1937                                | 76.52                   | 69                           | 67                            | 10                             | 6.42                | 2                        |
| 1938                                | 3,056.37                | 2,751                        | 2,685                         | 371                            | 6.44                | 58                       |
| 1939                                | 130,137.17              | 117,044                      | 114,246                       | 15,891                         | 6.45                | 2,464                    |
| 1940                                | 3,224.05                | 2,897                        | 2,828                         | 396                            | 6.47                | 61                       |
| 1941                                | 7,130.97                | 6,401                        | 6,248                         | 883                            | 6.49                | 136                      |
| 1942                                | 535.24                  | 480                          | 469                           | 66                             | 6.50                | 10                       |
| 1943                                | 1,845.04                | 1,653                        | 1,613                         | 232                            | 6.52                | 36                       |
| 1944                                | 2,384.13                | 2,134                        | 2,083                         | 301                            | 6.53                | 46                       |
| 1945                                | 1,742.88                | 1,558                        | 1,521                         | 222                            | 6.55                | 34                       |
| 1946                                | 1,286.14                | 1,149                        | 1,122                         | 164                            | 6.56                | 25                       |
| 1947                                | 575.40                  | 513                          | 501                           | 74                             | 6.57                | 11                       |
| 1948                                | 8,234.37                | 7,336                        | 7,160                         | 1,074                          | 6.59                | 163                      |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.1 MAINS - CAST IRON

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR<br>(1)                                                           | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| INTERIM SURVIVOR CURVE.. IOWA 71-R1                                   |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 12-2025                                    |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                               |                         |                              |                               |                                |                     |                          |
| 1949                                                                  | 29.33                   | 26                           | 25                            | 4                              | 6.60                | 1                        |
| 1951                                                                  | 21.90                   | 19                           | 19                            | 3                              | 6.63                |                          |
| 1982                                                                  | 332.51                  | 280                          | 273                           | 60                             | 6.87                | 9                        |
|                                                                       | 343,949.20              | 310,866                      | 303,432                       | 40,517                         |                     | 6,409                    |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.3 1.86 |                         |                              |                               |                                |                     |                          |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.3 MAINS - BARE STEEL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR<br>(1)                         | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| INTERIM SURVIVOR CURVE.. IOWA 71-R1 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 12-2030  |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0             |                         |                              |                               |                                |                     |                          |
| 1936                                | 984.99                  | 836                          | 974                           | 11                             | 10.11               | 1                        |
| 1937                                | 25,369.55               | 21,486                       | 25,021                        | 349                            | 10.16               | 34                       |
| 1938                                | 27,085.93               | 22,905                       | 26,673                        | 413                            | 10.20               | 40                       |
| 1939                                | 31,991.69               | 27,007                       | 31,450                        | 542                            | 10.25               | 53                       |
| 1940                                | 84,674.85               | 71,354                       | 83,092                        | 1,583                          | 10.30               | 154                      |
| 1941                                | 135,592.21              | 114,072                      | 132,838                       | 2,754                          | 10.34               | 266                      |
| 1942                                | 63,502.58               | 53,322                       | 62,094                        | 1,409                          | 10.39               | 136                      |
| 1943                                | 43,527.84               | 36,486                       | 42,488                        | 1,040                          | 10.43               | 100                      |
| 1944                                | 14,257.00               | 11,929                       | 13,891                        | 366                            | 10.47               | 35                       |
| 1945                                | 13,657.35               | 11,406                       | 13,282                        | 375                            | 10.51               | 36                       |
| 1946                                | 100,604.90              | 83,856                       | 97,651                        | 2,954                          | 10.55               | 280                      |
| 1947                                | 69,266.33               | 57,619                       | 67,098                        | 2,168                          | 10.59               | 205                      |
| 1948                                | 179,556.88              | 149,057                      | 173,578                       | 5,979                          | 10.63               | 562                      |
| 1949                                | 494,548.68              | 409,748                      | 477,155                       | 17,394                         | 10.66               | 1,632                    |
| 1950                                | 937,058.62              | 774,685                      | 902,128                       | 34,931                         | 10.70               | 3,265                    |
| 1951                                | 768,131.37              | 633,593                      | 737,825                       | 30,306                         | 10.74               | 2,822                    |
| 1952                                | 1,676,124.79            | 1,379,602                    | 1,606,560                     | 69,565                         | 10.77               | 6,459                    |
| 1953                                | 1,193,762.46            | 980,377                      | 1,141,658                     | 52,104                         | 10.80               | 4,824                    |
| 1954                                | 1,490,875.79            | 1,221,340                    | 1,422,262                     | 68,614                         | 10.84               | 6,330                    |
| 1955                                | 3,689,365.69            | 3,015,134                    | 3,511,152                     | 178,214                        | 10.87               | 16,395                   |
| 1956                                | 2,167,020.39            | 1,766,598                    | 2,057,220                     | 109,800                        | 10.90               | 10,073                   |
| 1957                                | 2,861,669.81            | 2,326,995                    | 2,709,808                     | 151,862                        | 10.93               | 13,894                   |
| 1958                                | 3,350,058.73            | 2,716,898                    | 3,163,853                     | 186,206                        | 10.96               | 16,990                   |
| 1959                                | 2,704,420.23            | 2,187,254                    | 2,547,078                     | 157,342                        | 10.99               | 14,317                   |
| 1960                                | 2,925,828.22            | 2,359,563                    | 2,747,733                     | 178,095                        | 11.02               | 16,161                   |
| 1961                                | 3,236,729.69            | 2,603,172                    | 3,031,418                     | 205,312                        | 11.04               | 18,597                   |
| 1962                                | 2,753,728.50            | 2,207,912                    | 2,571,134                     | 182,594                        | 11.07               | 16,494                   |
| 1963                                | 3,623,247.09            | 2,895,844                    | 3,372,238                     | 251,009                        | 11.10               | 22,613                   |
| 1964                                | 3,496,147.23            | 2,785,660                    | 3,243,927                     | 252,220                        | 11.12               | 22,682                   |
| 1965                                | 2,801,895.95            | 2,224,845                    | 2,590,853                     | 211,043                        | 11.15               | 18,928                   |
| 1966                                | 4,050,666.29            | 3,205,738                    | 3,733,112                     | 317,554                        | 11.17               | 28,429                   |
| 1967                                | 3,827,753.94            | 3,018,835                    | 3,515,462                     | 312,292                        | 11.19               | 27,908                   |
| 1968                                | 2,874,382.95            | 2,258,201                    | 2,629,697                     | 244,686                        | 11.22               | 21,808                   |
| 1969                                | 2,257,798.10            | 1,767,224                    | 2,057,949                     | 199,849                        | 11.24               | 17,780                   |
| 1970                                | 1,038,668.18            | 809,798                      | 943,018                       | 95,650                         | 11.26               | 8,495                    |
| 1971                                | 2,504,296.24            | 1,944,486                    | 2,264,372                     | 239,924                        | 11.28               | 21,270                   |
| 1972                                | 903,391.18              | 698,448                      | 813,349                       | 90,042                         | 11.30               | 7,968                    |
| 1973                                | 591,780.59              | 455,511                      | 530,447                       | 61,334                         | 11.32               | 5,418                    |
| 1974                                | 1,298.38                | 995                          | 1,159                         | 139                            | 11.34               | 12                       |
| 1975                                | 784.59                  | 598                          | 696                           | 89                             | 11.36               | 8                        |
| 1976                                | 250.44                  | 198                          | 231                           | 19                             | 11.34               | 2                        |
| 1977                                | 2,066.80                | 1,626                        | 1,893                         | 174                            | 11.22               | 16                       |



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.3 MAINS - BARE STEEL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR<br>(1)                         | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| INTERIM SURVIVOR CURVE.. IOWA 71-R1 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 12-2030  |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0             |                         |                              |                               |                                |                     |                          |
| 1978                                | 170,073.11              | 132,657                      | 154,481                       | 15,592                         | 11.40               | 1,368                    |
| 1979                                | 17,768.99               | 13,798                       | 16,068                        | 1,701                          | 11.35               | 150                      |
| 1980                                | 205,518.53              | 158,701                      | 184,809                       | 20,710                         | 11.33               | 1,828                    |
| 1981                                | 58.42                   | 45                           | 52                            | 6                              | 11.37               | 1                        |
| 1983                                | 7,596.48                | 5,757                        | 6,704                         | 892                            | 11.31               | 79                       |
| 1984                                | 203.00                  | 152                          | 177                           | 26                             | 11.45               | 2                        |
| 1985                                | 35.34                   | 26                           | 30                            | 5                              | 11.43               |                          |
| 1986                                | 82.03                   | 61                           | 71                            | 11                             | 11.44               | 1                        |
| 1988                                | 0.10                    |                              |                               |                                |                     |                          |
| 1989                                | 893.99                  | 644                          | 750                           | 144                            | 11.40               | 13                       |
| 1990                                | 11,690.51               | 8,339                        | 9,711                         | 1,980                          | 11.42               | 173                      |
| 1992                                | 45,102.54               | 31,455                       | 36,630                        | 8,473                          | 11.46               | 739                      |
| 1997                                | 4,008.14                | 2,610                        | 3,039                         | 969                            | 11.48               | 84                       |
| 1998                                | 662.39                  | 423                          | 493                           | 169                            | 11.53               | 15                       |
| 2008                                | 77.79                   | 37                           | 43                            | 35                             | 11.51               | 3                        |
| 2011                                | 32,355.58               | 12,693                       | 14,781                        | 17,575                         | 11.49               | 1,530                    |
|                                     | 59,509,949.96           | 47,679,611                   | 55,523,356                    | 3,986,594                      |                     | 359,478                  |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 11.1 0.60

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.45 MAINS - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR                        | ORIGINAL<br>COST | CALCULATED<br>ACCRUED | ALLOC. BOOK<br>RESERVE | FUTURE BOOK<br>ACCRUALS | REM.<br>LIFE | ANNUAL<br>ACCRUAL |
|-----------------------------|------------------|-----------------------|------------------------|-------------------------|--------------|-------------------|
| (1)                         | (2)              | (3)                   | (4)                    | (5)                     | (6)          | (7)               |
| SURVIVOR CURVE.. IOWA 71-R1 |                  |                       |                        |                         |              |                   |
| NET SALVAGE PERCENT.. 0     |                  |                       |                        |                         |              |                   |
| 1952                        | 106,210.88       | 63,801                | 50,586                 | 55,625                  | 28.35        | 1,962             |
| 1954                        | 27,284.71        | 15,994                | 12,681                 | 14,604                  | 29.38        | 497               |
| 1955                        | 101,442.44       | 58,722                | 46,559                 | 54,883                  | 29.90        | 1,836             |
| 1956                        | 92,730.12        | 53,000                | 42,022                 | 50,708                  | 30.42        | 1,667             |
| 1957                        | 87,770.88        | 49,498                | 39,245                 | 48,526                  | 30.96        | 1,567             |
| 1958                        | 81,046.77        | 45,101                | 35,759                 | 45,288                  | 31.49        | 1,438             |
| 1959                        | 89,807.84        | 49,293                | 39,083                 | 50,725                  | 32.03        | 1,584             |
| 1960                        | 61,203.81        | 33,119                | 26,259                 | 34,945                  | 32.58        | 1,073             |
| 1961                        | 26,513.29        | 14,142                | 11,213                 | 15,300                  | 33.13        | 462               |
| 1962                        | 78,811.32        | 41,426                | 32,845                 | 45,966                  | 33.68        | 1,365             |
| 1963                        | 101,768.39       | 52,691                | 41,777                 | 59,991                  | 34.24        | 1,752             |
| 1964                        | 163,861.52       | 83,546                | 66,241                 | 97,621                  | 34.80        | 2,805             |
| 1965                        | 79,860.41        | 40,076                | 31,775                 | 48,085                  | 35.37        | 1,359             |
| 1966                        | 113,426.43       | 55,994                | 44,396                 | 69,030                  | 35.95        | 1,920             |
| 1967                        | 71,501.03        | 34,713                | 27,523                 | 43,978                  | 36.53        | 1,204             |
| 1968                        | 308,394.89       | 147,203               | 116,713                | 191,682                 | 37.11        | 5,165             |
| 1969                        | 657,326.57       | 308,293               | 244,436                | 412,891                 | 37.70        | 10,952            |
| 1970                        | 689,443.09       | 317,626               | 251,836                | 437,607                 | 38.29        | 11,429            |
| 1971                        | 1,386,767.48     | 627,166               | 497,261                | 889,506                 | 38.89        | 22,872            |
| 1972                        | 1,085,606.51     | 481,792               | 381,999                | 703,608                 | 39.49        | 17,817            |
| 1973                        | 2,482,952.05     | 1,080,606             | 856,780                | 1,626,172               | 40.10        | 40,553            |
| 1974                        | 2,844,137.58     | 1,213,366             | 962,042                | 1,882,096               | 40.71        | 46,232            |
| 1975                        | 2,789,147.92     | 1,165,557             | 924,136                | 1,865,012               | 41.33        | 45,125            |
| 1976                        | 2,587,301.34     | 1,415,771             | 1,122,523              | 1,464,778               | 35.10        | 41,732            |
| 1977                        | 5,027,493.02     | 2,706,802             | 2,146,143              | 2,881,350               | 35.51        | 81,142            |
| 1978                        | 5,033,689.27     | 2,665,338             | 2,113,268              | 2,920,421               | 35.92        | 81,303            |
| 1979                        | 6,130,129.65     | 3,189,506             | 2,528,865              | 3,601,265               | 36.34        | 99,099            |
| 1980                        | 7,654,974.14     | 3,910,926             | 3,100,857              | 4,554,117               | 36.77        | 123,854           |
| 1981                        | 8,680,011.89     | 4,352,158             | 3,450,697              | 5,229,315               | 37.21        | 140,535           |
| 1982                        | 8,828,136.38     | 4,339,912             | 3,440,988              | 5,387,148               | 37.66        | 143,047           |
| 1983                        | 7,110,467.88     | 3,425,112             | 2,715,670              | 4,394,798               | 38.11        | 115,319           |
| 1984                        | 8,224,888.30     | 3,878,035             | 3,074,779              | 5,150,109               | 38.58        | 133,492           |
| 1985                        | 7,508,382.29     | 3,462,866             | 2,745,604              | 4,762,778               | 39.04        | 121,997           |
| 1986                        | 8,526,288.40     | 3,869,230             | 3,067,798              | 5,458,490               | 39.01        | 139,925           |
| 1987                        | 8,211,088.70     | 3,637,512             | 2,884,075              | 5,327,014               | 39.50        | 134,861           |
| 1988                        | 9,472,165.12     | 4,091,028             | 3,243,655              | 6,228,510               | 40.01        | 155,674           |
| 1989                        | 8,551,409.09     | 3,597,578             | 2,852,413              | 5,698,996               | 40.51        | 140,681           |
| 1990                        | 6,975,815.54     | 2,874,036             | 2,278,738              | 4,697,078               | 40.55        | 115,834           |
| 1991                        | 7,058,695.69     | 2,825,596             | 2,240,331              | 4,818,365               | 41.08        | 117,292           |
| 1992                        | 7,992,241.72     | 3,103,387             | 2,460,584              | 5,531,658               | 41.61        | 132,941           |
| 1993                        | 8,659,137.80     | 3,279,215             | 2,599,992              | 6,059,146               | 41.70        | 145,303           |
| 1994                        | 10,647,132.20    | 3,898,980             | 3,091,386              | 7,555,746               | 42.25        | 178,834           |
| 1995                        | 10,677,584.05    | 3,800,152             | 3,013,028              | 7,664,556               | 42.38        | 180,853           |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.45 MAINS - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR<br>(1)                                                  | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|--------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 71-R1                                  |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                      |                         |                              |                               |                                |                     |                          |
| 1996                                                         | 10,452,223.70           | 3,608,108                    | 2,860,762                     | 7,591,462                      | 42.52               | 178,539                  |
| 1997                                                         | 13,154,999.67           | 4,367,460                    | 3,462,830                     | 9,692,170                      | 43.10               | 224,876                  |
| 1998                                                         | 11,172,507.60           | 3,580,789                    | 2,839,101                     | 8,333,407                      | 43.28               | 192,546                  |
| 1999                                                         | 10,399,100.32           | 3,210,202                    | 2,545,274                     | 7,853,826                      | 43.48               | 180,631                  |
| 2000                                                         | 9,775,629.03            | 2,898,474                    | 2,298,114                     | 7,477,515                      | 43.70               | 171,110                  |
| 2001                                                         | 11,584,867.87           | 3,288,944                    | 2,607,706                     | 8,977,162                      | 43.93               | 204,352                  |
| 2002                                                         | 7,501,344.16            | 2,032,114                    | 1,611,203                     | 5,890,141                      | 44.19               | 133,291                  |
| 2003                                                         | 11,164,006.70           | 2,891,478                    | 2,292,567                     | 8,871,440                      | 44.11               | 201,121                  |
| 2004                                                         | 17,229,241.66           | 4,222,887                    | 3,348,202                     | 13,881,040                     | 44.41               | 312,566                  |
| 2005                                                         | 23,611,497.87           | 5,480,229                    | 4,345,111                     | 19,266,387                     | 44.39               | 434,025                  |
| 2006                                                         | 12,983,384.37           | 2,836,869                    | 2,249,269                     | 10,734,115                     | 44.40               | 241,759                  |
| 2007                                                         | 37,669,510.05           | 7,699,648                    | 6,104,823                     | 31,564,687                     | 44.45               | 710,117                  |
| 2008                                                         | 57,405,709.03           | 10,884,122                   | 8,629,698                     | 48,776,011                     | 44.53               | 1,095,352                |
| 2009                                                         | 35,463,690.39           | 6,213,239                    | 4,926,293                     | 30,537,397                     | 44.34               | 688,710                  |
| 2010                                                         | 46,674,607.83           | 7,463,270                    | 5,917,406                     | 40,757,202                     | 44.22               | 921,692                  |
| 2011                                                         | 84,695,620.50           | 12,246,987                   | 9,710,273                     | 74,985,348                     | 43.87               | 1,709,263                |
| 2012                                                         | 93,554,575.12           | 12,003,052                   | 9,516,864                     | 84,037,711                     | 43.58               | 1,928,355                |
| 2013                                                         | 120,772,953.09          | 13,478,262                   | 10,686,515                    | 110,086,438                    | 43.13               | 2,552,433                |
| 2014                                                         | 126,186,995.91          | 11,924,671                   | 9,454,718                     | 116,732,278                    | 42.31               | 2,758,976                |
| 2015                                                         | 123,683,484.37          | 9,424,682                    | 7,472,551                     | 116,210,933                    | 41.43               | 2,804,995                |
| 2016                                                         | 169,902,822.63          | 9,684,461                    | 7,678,522                     | 162,224,301                    | 39.96               | 4,059,667                |
| 2017                                                         | 180,560,084.59          | 6,716,835                    | 5,325,580                     | 175,234,505                    | 37.76               | 4,640,744                |
| 2018                                                         | 145,749,237.00          | 1,851,015                    | 1,467,615                     | 144,281,622                    | 32.37               | 4,457,264                |
|                                                              | 1,528,432,141.86        | 222,363,663                  | 176,305,558                   | 1,352,126,584                  |                     | 33,548,738               |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. |                         |                              |                               |                                |                     | 40.3 2.19                |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR<br>(1)                 | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 45-01 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1960                        | 119,491.79              | 77,563                       | 60,401                        | 59,091                         | 15.79               | 3,742                    |
| 1961                        | 81,372.71               | 51,916                       | 40,429                        | 40,944                         | 16.29               | 2,513                    |
| 1962                        | 120,852.99              | 75,762                       | 58,999                        | 61,854                         | 16.79               | 3,684                    |
| 1963                        | 125,270.77              | 77,139                       | 60,071                        | 65,200                         | 17.29               | 3,771                    |
| 1964                        | 76,466.25               | 46,237                       | 36,007                        | 40,459                         | 17.79               | 2,274                    |
| 1965                        | 70,506.38               | 41,850                       | 32,590                        | 37,916                         | 18.29               | 2,073                    |
| 1966                        | 107,417.25              | 62,564                       | 48,721                        | 58,696                         | 18.79               | 3,124                    |
| 1967                        | 51,616.69               | 29,490                       | 22,965                        | 28,652                         | 19.29               | 1,485                    |
| 1968                        | 55,630.80               | 31,165                       | 24,269                        | 31,362                         | 19.79               | 1,585                    |
| 1969                        | 70,565.65               | 38,748                       | 30,175                        | 40,391                         | 20.29               | 1,991                    |
| 1970                        | 39,640.30               | 21,326                       | 16,607                        | 23,033                         | 20.79               | 1,108                    |
| 1971                        | 162,729.22              | 85,740                       | 66,769                        | 95,960                         | 21.29               | 4,507                    |
| 1972                        | 127,337.21              | 65,678                       | 51,146                        | 76,191                         | 21.79               | 3,497                    |
| 1973                        | 134,785.99              | 68,022                       | 52,971                        | 81,815                         | 22.29               | 3,670                    |
| 1974                        | 111,162.02              | 54,865                       | 42,726                        | 68,436                         | 22.79               | 3,003                    |
| 1975                        | 103,061.86              | 49,721                       | 38,720                        | 64,342                         | 23.29               | 2,763                    |
| 1976                        | 86,881.77               | 58,228                       | 45,344                        | 41,538                         | 20.87               | 1,990                    |
| 1977                        | 68,476.68               | 45,379                       | 35,338                        | 33,139                         | 21.08               | 1,572                    |
| 1978                        | 64,619.03               | 42,048                       | 32,744                        | 31,875                         | 21.70               | 1,469                    |
| 1979                        | 80,495.75               | 51,719                       | 40,276                        | 40,220                         | 21.93               | 1,834                    |
| 1980                        | 125,999.44              | 79,871                       | 62,199                        | 63,800                         | 22.19               | 2,875                    |
| 1981                        | 171,849.61              | 107,389                      | 83,628                        | 88,222                         | 22.46               | 3,928                    |
| 1982                        | 463,494.12              | 285,234                      | 222,123                       | 241,371                        | 22.76               | 10,605                   |
| 1983                        | 178,641.98              | 108,186                      | 84,249                        | 94,393                         | 23.06               | 4,093                    |
| 1984                        | 162,085.58              | 96,506                       | 75,153                        | 86,933                         | 23.39               | 3,717                    |
| 1985                        | 236,668.54              | 138,404                      | 107,781                       | 128,888                        | 23.73               | 5,431                    |
| 1986                        | 215,026.34              | 123,382                      | 96,082                        | 118,944                        | 24.08               | 4,940                    |
| 1987                        | 195,819.60              | 110,736                      | 86,234                        | 109,586                        | 24.14               | 4,540                    |
| 1988                        | 359,484.07              | 199,010                      | 154,977                       | 204,507                        | 24.53               | 8,337                    |
| 1989                        | 387,968.50              | 211,132                      | 164,417                       | 223,552                        | 24.64               | 9,073                    |
| 1990                        | 286,368.93              | 152,176                      | 118,505                       | 167,864                        | 25.06               | 6,698                    |
| 1991                        | 234,306.01              | 122,050                      | 95,045                        | 139,261                        | 25.22               | 5,522                    |
| 1992                        | 130,327.64              | 66,441                       | 51,740                        | 78,588                         | 25.40               | 3,094                    |
| 1993                        | 216,873.09              | 108,046                      | 84,140                        | 132,733                        | 25.60               | 5,185                    |
| 1994                        | 360,179.66              | 175,011                      | 136,288                       | 223,892                        | 25.83               | 8,668                    |
| 1995                        | 221,014.64              | 104,540                      | 81,409                        | 139,606                        | 26.09               | 5,351                    |
| 1996                        | 442,070.07              | 204,148                      | 158,978                       | 283,092                        | 26.13               | 10,834                   |
| 1997                        | 461,616.15              | 206,619                      | 160,902                       | 300,714                        | 26.43               | 11,378                   |
| 1998                        | 355,887.56              | 154,775                      | 120,529                       | 235,359                        | 26.53               | 8,871                    |
| 1999                        | 709,926.92              | 299,092                      | 232,915                       | 477,012                        | 26.67               | 17,886                   |
| 2000                        | 1,113,869.42            | 455,350                      | 354,599                       | 759,270                        | 26.63               | 28,512                   |
| 2001                        | 319,644.38              | 125,812                      | 97,975                        | 221,669                        | 26.83               | 8,262                    |
| 2002                        | 357,158.10              | 135,434                      | 105,468                       | 251,690                        | 26.87               | 9,367                    |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR<br>(1)                                                       | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 45-01                                       |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                           |                         |                              |                               |                                |                     |                          |
| 2003                                                              | 603,898.73              | 220,665                      | 171,840                       | 432,059                        | 26.78               | 16,134                   |
| 2004                                                              | 510,244.81              | 178,024                      | 138,634                       | 371,611                        | 26.90               | 13,815                   |
| 2005                                                              | 530,850.60              | 177,357                      | 138,115                       | 392,736                        | 26.74               | 14,687                   |
| 2006                                                              | 1,223,591.10            | 387,389                      | 301,675                       | 921,916                        | 26.80               | 34,400                   |
| 2007                                                              | 581,892.34              | 174,742                      | 136,078                       | 445,814                        | 26.60               | 16,760                   |
| 2008                                                              | 1,833,665.78            | 517,644                      | 403,110                       | 1,430,556                      | 26.48               | 54,024                   |
| 2009                                                              | 1,300,832.57            | 343,030                      | 267,131                       | 1,033,702                      | 26.30               | 39,304                   |
| 2010                                                              | 1,478,202.44            | 362,012                      | 281,913                       | 1,196,289                      | 25.95               | 46,100                   |
| 2011                                                              | 2,165,294.48            | 485,026                      | 377,709                       | 1,787,585                      | 25.70               | 69,556                   |
| 2012                                                              | 1,627,218.43            | 330,000                      | 256,984                       | 1,370,234                      | 25.23               | 54,310                   |
| 2013                                                              | 3,230,562.25            | 582,793                      | 453,843                       | 2,776,719                      | 24.61               | 112,829                  |
| 2014                                                              | 11,304,730.28           | 1,762,407                    | 1,372,455                     | 9,932,275                      | 23.91               | 415,403                  |
| 2015                                                              | 178,245.20              | 23,083                       | 17,976                        | 160,269                        | 22.97               | 6,977                    |
| 2016                                                              | 8,897,210.99            | 892,390                      | 694,938                       | 8,202,273                      | 21.68               | 378,334                  |
| 2017                                                              | 13,532,431.30           | 926,972                      | 721,869                       | 12,810,562                     | 19.82               | 646,345                  |
| 2018                                                              | 22,283,634.00           | 574,918                      | 447,711                       | 21,835,923                     | 15.74               | 1,387,289                |
|                                                                   | 80,847,166.76           | 12,782,956                   | 9,954,585                     | 70,892,582                     |                     | 3,545,089                |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 20.0 |                         |                              |                               |                                |                     | 4.38                     |

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, 2018

| YEAR<br>(1)                                                            | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|------------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 35-S2                                            |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                                |                         |                              |                               |                                |                     |                          |
| 1976                                                                   | 591.42                  | 519                          | 509                           | 82                             | 5.89                | 14                       |
| 1983                                                                   | 32,512.26               | 26,598                       | 26,101                        | 6,411                          | 7.87                | 815                      |
| 1984                                                                   | 1,528.08                | 1,236                        | 1,213                         | 315                            | 8.14                | 39                       |
| 1987                                                                   | 7,476.62                | 5,778                        | 5,670                         | 1,807                          | 9.24                | 196                      |
| 1988                                                                   | 15,907.49               | 12,096                       | 11,870                        | 4,037                          | 9.58                | 421                      |
| 1989                                                                   | 34,134.70               | 25,403                       | 24,928                        | 9,207                          | 10.11               | 911                      |
| 1996                                                                   | 48,076.94               | 30,284                       | 29,718                        | 18,359                         | 13.17               | 1,394                    |
|                                                                        | 140,227.51              | 101,914                      | 100,009                       | 40,219                         |                     | 3,790                    |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 10.6 2.70 |                         |                              |                               |                                |                     |                          |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 380.3 SERVICES - BARE STEEL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR<br>(1)                           | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|---------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| INTERIM SURVIVOR CURVE.. IOWA 50-R0.5 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 12-2030    |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0               |                         |                              |                               |                                |                     |                          |
| 1926                                  | 0.20                    |                              |                               |                                |                     |                          |
| 1927                                  | 3,857.71                | 3,543                        | 3,503                         | 355                            | 4.08                | 87                       |
| 1928                                  | 5,130.07                | 4,665                        | 4,613                         | 517                            | 4.53                | 114                      |
| 1929                                  | 6,668.07                | 6,005                        | 5,938                         | 730                            | 4.97                | 147                      |
| 1930                                  | 4,218.43                | 3,763                        | 3,721                         | 497                            | 5.40                | 92                       |
| 1931                                  | 2,566.03                | 2,268                        | 2,243                         | 323                            | 5.81                | 56                       |
| 1932                                  | 1,598.61                | 1,401                        | 1,385                         | 214                            | 6.17                | 35                       |
| 1933                                  | 2,656.19                | 2,311                        | 2,285                         | 371                            | 6.49                | 57                       |
| 1934                                  | 2,336.39                | 2,020                        | 1,997                         | 339                            | 6.76                | 50                       |
| 1935                                  | 1,928.67                | 1,658                        | 1,639                         | 290                            | 7.00                | 41                       |
| 1936                                  | 3,615.87                | 3,094                        | 3,059                         | 557                            | 7.21                | 77                       |
| 1937                                  | 4,875.06                | 4,151                        | 4,104                         | 771                            | 7.41                | 104                      |
| 1938                                  | 8,369.81                | 7,097                        | 7,017                         | 1,353                          | 7.58                | 178                      |
| 1939                                  | 13,928.62               | 11,761                       | 11,629                        | 2,300                          | 7.75                | 297                      |
| 1940                                  | 11,496.45               | 9,670                        | 9,561                         | 1,935                          | 7.90                | 245                      |
| 1941                                  | 15,196.26               | 12,737                       | 12,594                        | 2,602                          | 8.04                | 324                      |
| 1942                                  | 15,426.41               | 12,883                       | 12,738                        | 2,688                          | 8.18                | 329                      |
| 1943                                  | 6,589.20                | 5,485                        | 5,423                         | 1,166                          | 8.30                | 140                      |
| 1944                                  | 4,929.03                | 4,090                        | 4,044                         | 885                            | 8.42                | 105                      |
| 1945                                  | 5,572.46                | 4,608                        | 4,556                         | 1,016                          | 8.54                | 119                      |
| 1946                                  | 13,975.05               | 11,523                       | 11,394                        | 2,581                          | 8.64                | 299                      |
| 1947                                  | 28,048.24               | 23,054                       | 22,795                        | 5,253                          | 8.75                | 600                      |
| 1948                                  | 36,804.20               | 30,160                       | 29,821                        | 6,983                          | 8.85                | 789                      |
| 1949                                  | 55,132.35               | 45,053                       | 44,547                        | 10,585                         | 8.94                | 1,184                    |
| 1950                                  | 72,097.15               | 58,730                       | 58,071                        | 14,026                         | 9.04                | 1,552                    |
| 1951                                  | 92,246.30               | 74,921                       | 74,080                        | 18,166                         | 9.13                | 1,990                    |
| 1952                                  | 96,609.99               | 78,245                       | 77,367                        | 19,243                         | 9.21                | 2,089                    |
| 1953                                  | 91,713.22               | 74,066                       | 73,235                        | 18,478                         | 9.29                | 1,989                    |
| 1954                                  | 142,772.07              | 114,960                      | 113,669                       | 29,103                         | 9.37                | 3,106                    |
|                                       | 750,358.11              | 613,922                      | 607,028                       | 143,330                        |                     | 16,195                   |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 8.9 2.16

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 380.45 SERVICES - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR<br>(1)                   | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 50-R0.5 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0       |                         |                              |                               |                                |                     |                          |
| 1955                          | 217,832.22              | 150,130                      | 148,444                       | 69,388                         | 15.54               | 4,465                    |
| 1956                          | 277,268.43              | 188,709                      | 186,590                       | 90,678                         | 15.97               | 5,678                    |
| 1957                          | 262,660.64              | 176,508                      | 174,526                       | 88,135                         | 16.40               | 5,374                    |
| 1958                          | 349,210.33              | 231,666                      | 229,065                       | 120,145                        | 16.83               | 7,139                    |
| 1959                          | 448,614.19              | 293,663                      | 290,365                       | 158,249                        | 17.27               | 9,163                    |
| 1960                          | 478,656.93              | 309,117                      | 305,646                       | 173,011                        | 17.71               | 9,769                    |
| 1961                          | 573,351.00              | 365,225                      | 361,124                       | 212,227                        | 18.15               | 11,693                   |
| 1962                          | 571,330.27              | 358,795                      | 354,766                       | 216,564                        | 18.60               | 11,643                   |
| 1963                          | 659,539.09              | 408,123                      | 403,540                       | 255,999                        | 19.06               | 13,431                   |
| 1964                          | 667,166.14              | 406,838                      | 402,270                       | 264,896                        | 19.51               | 13,577                   |
| 1965                          | 661,493.39              | 397,161                      | 392,701                       | 268,792                        | 19.98               | 13,453                   |
| 1966                          | 876,694.80              | 518,302                      | 512,482                       | 364,213                        | 20.44               | 17,819                   |
| 1967                          | 912,889.90              | 531,119                      | 525,155                       | 387,735                        | 20.91               | 18,543                   |
| 1968                          | 987,910.22              | 565,282                      | 558,934                       | 428,976                        | 21.39               | 20,055                   |
| 1969                          | 734,019.29              | 412,959                      | 408,322                       | 325,697                        | 21.87               | 14,892                   |
| 1970                          | 697,901.96              | 385,940                      | 381,606                       | 316,296                        | 22.35               | 14,152                   |
| 1971                          | 628,155.08              | 341,214                      | 337,382                       | 290,773                        | 22.84               | 12,731                   |
| 1972                          | 633,774.81              | 337,929                      | 334,134                       | 299,641                        | 23.34               | 12,838                   |
| 1973                          | 497,261.82              | 260,267                      | 257,344                       | 239,918                        | 23.83               | 10,068                   |
| 1974                          | 128,524.71              | 65,959                       | 65,218                        | 63,307                         | 24.34               | 2,601                    |
| 1975                          | 213,712.38              | 107,497                      | 106,290                       | 107,422                        | 24.85               | 4,323                    |
| 1976                          | 604,549.51              | 400,030                      | 395,538                       | 209,012                        | 21.69               | 9,636                    |
| 1977                          | 2,103,538.38            | 1,367,721                    | 1,352,363                     | 751,175                        | 22.28               | 33,715                   |
| 1978                          | 1,619,494.74            | 1,040,687                    | 1,029,001                     | 590,494                        | 22.48               | 26,268                   |
| 1979                          | 2,074,971.64            | 1,308,685                    | 1,293,989                     | 780,983                        | 23.08               | 33,838                   |
| 1980                          | 2,876,631.68            | 1,790,416                    | 1,770,311                     | 1,106,321                      | 23.31               | 47,461                   |
| 1981                          | 3,158,178.80            | 1,937,859                    | 1,916,098                     | 1,242,081                      | 23.56               | 52,720                   |
| 1982                          | 2,667,101.26            | 1,602,661                    | 1,584,664                     | 1,082,437                      | 24.19               | 44,747                   |
| 1983                          | 2,517,477.43            | 1,489,088                    | 1,472,367                     | 1,045,110                      | 24.46               | 42,727                   |
| 1984                          | 2,941,563.68            | 1,710,813                    | 1,691,602                     | 1,249,962                      | 24.76               | 50,483                   |
| 1985                          | 3,351,089.73            | 1,914,813                    | 1,893,311                     | 1,457,779                      | 25.06               | 58,172                   |
| 1986                          | 3,803,533.97            | 2,133,022                    | 2,109,070                     | 1,694,464                      | 25.39               | 66,737                   |
| 1987                          | 4,397,400.76            | 2,417,691                    | 2,390,542                     | 2,006,859                      | 25.73               | 77,997                   |
| 1988                          | 5,300,564.28            | 2,853,824                    | 2,821,778                     | 2,478,786                      | 26.08               | 95,045                   |
| 1989                          | 5,101,032.09            | 2,686,203                    | 2,656,039                     | 2,444,993                      | 26.45               | 92,438                   |
| 1990                          | 5,277,504.53            | 2,714,221                    | 2,683,742                     | 2,593,763                      | 26.83               | 96,674                   |
| 1991                          | 4,969,690.45            | 2,493,294                    | 2,465,296                     | 2,504,394                      | 27.23               | 91,972                   |
| 1992                          | 5,681,517.78            | 2,791,898                    | 2,760,547                     | 2,920,971                      | 27.34               | 106,839                  |
| 1993                          | 5,959,690.25            | 2,847,540                    | 2,815,564                     | 3,144,126                      | 27.78               | 113,179                  |
| 1994                          | 7,073,567.88            | 3,299,112                    | 3,262,066                     | 3,811,502                      | 27.94               | 136,417                  |
| 1995                          | 6,551,607.05            | 2,960,671                    | 2,927,425                     | 3,624,182                      | 28.40               | 127,612                  |
| 1996                          | 6,221,126.88            | 2,733,563                    | 2,702,867                     | 3,518,260                      | 28.60               | 123,016                  |
| 1997                          | 6,588,888.47            | 2,808,184                    | 2,776,650                     | 3,812,238                      | 28.83               | 132,232                  |



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 380.45 SERVICES - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR<br>(1)                                                  | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|--------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 50-R0.5                                |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                      |                         |                              |                               |                                |                     |                          |
| 1998                                                         | 7,047,471.61            | 2,906,377                    | 2,873,741                     | 4,173,731                      | 29.09               | 143,476                  |
| 1999                                                         | 7,443,659.12            | 2,962,576                    | 2,929,309                     | 4,514,350                      | 29.37               | 153,706                  |
| 2000                                                         | 7,595,108.58            | 2,923,357                    | 2,890,530                     | 4,704,579                      | 29.43               | 159,857                  |
| 2001                                                         | 7,287,711.99            | 2,690,623                    | 2,660,409                     | 4,627,303                      | 29.75               | 155,540                  |
| 2002                                                         | 6,386,942.48            | 2,264,810                    | 2,239,378                     | 4,147,564                      | 29.88               | 138,807                  |
| 2003                                                         | 6,116,305.71            | 2,074,651                    | 2,051,354                     | 4,064,952                      | 30.04               | 135,318                  |
| 2004                                                         | 8,678,102.10            | 2,815,176                    | 2,783,564                     | 5,894,538                      | 30.03               | 196,288                  |
| 2005                                                         | 9,334,116.90            | 2,867,441                    | 2,835,242                     | 6,498,875                      | 30.25               | 214,839                  |
| 2006                                                         | 9,161,169.09            | 2,673,229                    | 2,643,211                     | 6,517,958                      | 30.14               | 216,256                  |
| 2007                                                         | 12,648,449.52           | 3,465,675                    | 3,426,758                     | 9,221,692                      | 30.25               | 304,849                  |
| 2008                                                         | 15,031,160.91           | 3,850,983                    | 3,807,740                     | 11,223,421                     | 30.24               | 371,145                  |
| 2009                                                         | 13,988,156.36           | 3,331,979                    | 3,294,564                     | 10,693,592                     | 30.11               | 355,151                  |
| 2010                                                         | 16,213,451.79           | 3,562,095                    | 3,522,096                     | 12,691,356                     | 29.90               | 424,460                  |
| 2011                                                         | 23,515,603.01           | 4,707,824                    | 4,654,959                     | 18,860,644                     | 29.62               | 636,754                  |
| 2012                                                         | 29,596,857.29           | 5,318,555                    | 5,258,832                     | 24,338,025                     | 29.30               | 830,649                  |
| 2013                                                         | 35,465,398.04           | 5,589,347                    | 5,526,583                     | 29,938,815                     | 28.95               | 1,034,156                |
| 2014                                                         | 37,144,916.16           | 5,021,993                    | 4,965,600                     | 32,179,316                     | 28.26               | 1,138,688                |
| 2015                                                         | 42,479,330.60           | 4,702,462                    | 4,649,657                     | 37,829,674                     | 27.45               | 1,378,130                |
| 2016                                                         | 33,372,508.37           | 2,823,314                    | 2,791,610                     | 30,580,898                     | 26.15               | 1,169,442                |
| 2017                                                         | 52,631,597.98           | 2,978,948                    | 2,945,497                     | 49,686,101                     | 24.31               | 2,043,854                |
| 2018                                                         | 47,167,466.00           | 966,933                      | 956,075                       | 46,211,391                     | 19.95               | 2,316,360                |
|                                                              | 530,624,172.45          | 124,612,747                  | 123,213,443                   | 407,410,729                    |                     | 15,411,057               |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. |                         |                              |                               |                                |                     | 26.4 2.90                |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR<br>(1)                 | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 44-S1 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1913                        | 35.77                   | 36                           | 36                            |                                |                     |                          |
| 1914                        | 16.25                   | 16                           | 16                            |                                |                     |                          |
| 1915                        | 21.70                   | 22                           | 22                            |                                |                     |                          |
| 1916                        | 57.58                   | 58                           | 58                            |                                |                     |                          |
| 1917                        | 174.24                  | 174                          | 174                           |                                |                     |                          |
| 1918                        | 698.45                  | 698                          | 698                           |                                |                     |                          |
| 1919                        | 473.62                  | 474                          | 474                           |                                |                     |                          |
| 1920                        | 279.09                  | 279                          | 279                           |                                |                     |                          |
| 1921                        | 611.38                  | 611                          | 611                           |                                |                     |                          |
| 1922                        | 919.68                  | 920                          | 920                           |                                |                     |                          |
| 1923                        | 1,621.17                | 1,621                        | 1,621                         |                                |                     |                          |
| 1924                        | 1,197.21                | 1,197                        | 1,197                         |                                |                     |                          |
| 1925                        | 2,535.01                | 2,535                        | 2,535                         |                                |                     |                          |
| 1926                        | 3,122.51                | 3,123                        | 3,123                         |                                |                     |                          |
| 1927                        | 4,316.51                | 4,317                        | 4,317                         |                                |                     |                          |
| 1928                        | 5,399.19                | 5,399                        | 5,399                         |                                |                     |                          |
| 1929                        | 4,640.27                | 4,640                        | 4,640                         |                                |                     |                          |
| 1930                        | 359.13                  | 359                          | 359                           |                                |                     |                          |
| 1931                        | 22.94                   | 23                           | 23                            |                                |                     |                          |
| 1934                        | 120.18                  | 118                          | 120                           |                                |                     |                          |
| 1935                        | 24.89                   | 24                           | 25                            |                                |                     |                          |
| 1936                        | 437.12                  | 422                          | 437                           |                                |                     |                          |
| 1937                        | 71.78                   | 69                           | 72                            |                                |                     |                          |
| 1938                        | 217.00                  | 207                          | 215                           | 2                              | 2.04                | 1                        |
| 1939                        | 397.54                  | 377                          | 391                           | 7                              | 2.31                | 3                        |
| 1941                        | 1,985.98                | 1,856                        | 1,924                         | 62                             | 2.87                | 22                       |
| 1942                        | 2,736.10                | 2,540                        | 2,633                         | 103                            | 3.15                | 33                       |
| 1943                        | 1,797.50                | 1,657                        | 1,718                         | 80                             | 3.44                | 23                       |
| 1944                        | 112.02                  | 103                          | 107                           | 5                              | 3.73                | 1                        |
| 1945                        | 666.66                  | 606                          | 628                           | 39                             | 4.01                | 10                       |
| 1946                        | 4,029.65                | 3,635                        | 3,768                         | 262                            | 4.31                | 61                       |
| 1947                        | 2,179.31                | 1,951                        | 2,022                         | 157                            | 4.60                | 34                       |
| 1948                        | 15,020.49               | 13,348                       | 13,837                        | 1,183                          | 4.90                | 241                      |
| 1949                        | 15,752.00               | 13,890                       | 14,398                        | 1,354                          | 5.20                | 260                      |
| 1950                        | 28,221.46               | 24,694                       | 25,598                        | 2,623                          | 5.50                | 477                      |
| 1951                        | 53,237.40               | 46,207                       | 47,898                        | 5,339                          | 5.81                | 919                      |
| 1952                        | 33,959.10               | 29,236                       | 30,306                        | 3,653                          | 6.12                | 597                      |
| 1953                        | 18,401.76               | 15,713                       | 16,288                        | 2,114                          | 6.43                | 329                      |
| 1954                        | 52,422.99               | 44,381                       | 46,005                        | 6,418                          | 6.75                | 951                      |
| 1955                        | 65,951.52               | 55,354                       | 57,380                        | 8,572                          | 7.07                | 1,212                    |
| 1956                        | 29,972.92               | 24,939                       | 25,852                        | 4,121                          | 7.39                | 558                      |
| 1957                        | 128,589.04              | 106,028                      | 109,909                       | 18,680                         | 7.72                | 2,420                    |
| 1958                        | 166,251.75              | 135,836                      | 140,808                       | 25,444                         | 8.05                | 3,161                    |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR<br>(1)                 | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 44-S1 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1959                        | 169,951.72              | 137,584                      | 142,620                       | 27,332                         | 8.38                | 3,262                    |
| 1960                        | 173,798.77              | 139,355                      | 144,455                       | 29,344                         | 8.72                | 3,365                    |
| 1961                        | 225,353.55              | 178,951                      | 185,501                       | 39,853                         | 9.06                | 4,399                    |
| 1962                        | 222,532.92              | 174,942                      | 181,345                       | 41,188                         | 9.41                | 4,377                    |
| 1963                        | 138,695.25              | 107,930                      | 111,880                       | 26,815                         | 9.76                | 2,747                    |
| 1964                        | 206,121.40              | 158,761                      | 164,572                       | 41,549                         | 10.11               | 4,110                    |
| 1965                        | 240,577.27              | 183,332                      | 190,042                       | 50,535                         | 10.47               | 4,827                    |
| 1966                        | 249,603.51              | 188,111                      | 194,996                       | 54,608                         | 10.84               | 5,038                    |
| 1967                        | 246,785.50              | 183,912                      | 190,643                       | 56,142                         | 11.21               | 5,008                    |
| 1968                        | 195,934.46              | 144,368                      | 149,652                       | 46,282                         | 11.58               | 3,997                    |
| 1969                        | 198,720.26              | 144,704                      | 150,000                       | 48,720                         | 11.96               | 4,074                    |
| 1970                        | 169,419.67              | 121,867                      | 126,327                       | 43,093                         | 12.35               | 3,489                    |
| 1971                        | 292,603.52              | 207,880                      | 215,488                       | 77,116                         | 12.74               | 6,053                    |
| 1972                        | 248,044.14              | 173,968                      | 180,335                       | 67,709                         | 13.14               | 5,153                    |
| 1973                        | 144,911.73              | 100,318                      | 103,990                       | 40,922                         | 13.54               | 3,022                    |
| 1974                        | 187,770.37              | 128,238                      | 132,932                       | 54,838                         | 13.95               | 3,931                    |
| 1975                        | 222,102.84              | 149,566                      | 155,040                       | 67,063                         | 14.37               | 4,667                    |
| 1976                        | 103,209.04              | 78,800                       | 81,684                        | 21,525                         | 13.14               | 1,638                    |
| 1977                        | 184,257.20              | 138,893                      | 143,977                       | 40,280                         | 13.53               | 2,977                    |
| 1978                        | 180,841.84              | 134,492                      | 139,414                       | 41,428                         | 13.93               | 2,974                    |
| 1979                        | 308,810.02              | 227,624                      | 235,955                       | 72,855                         | 14.06               | 5,182                    |
| 1980                        | 601,400.09              | 436,677                      | 452,659                       | 148,741                        | 14.49               | 10,265                   |
| 1981                        | 649,318.05              | 464,068                      | 481,053                       | 168,265                        | 14.94               | 11,263                   |
| 1982                        | 439,722.72              | 310,664                      | 322,034                       | 117,689                        | 15.13               | 7,779                    |
| 1983                        | 327,604.35              | 227,423                      | 235,747                       | 91,857                         | 15.60               | 5,888                    |
| 1984                        | 433,924.79              | 297,195                      | 308,072                       | 125,853                        | 15.83               | 7,950                    |
| 1985                        | 555,421.35              | 373,077                      | 386,732                       | 168,689                        | 16.33               | 10,330                   |
| 1986                        | 601,636.79              | 397,862                      | 412,424                       | 189,213                        | 16.60               | 11,398                   |
| 1987                        | 607,192.39              | 392,975                      | 407,358                       | 199,834                        | 17.13               | 11,666                   |
| 1988                        | 678,344.40              | 431,224                      | 447,007                       | 231,337                        | 17.43               | 13,272                   |
| 1989                        | 769,813.10              | 480,055                      | 497,625                       | 272,188                        | 17.75               | 15,335                   |
| 1990                        | 486,565.45              | 295,880                      | 306,709                       | 179,856                        | 18.31               | 9,823                    |
| 1991                        | 542,610.21              | 322,799                      | 334,614                       | 207,996                        | 18.67               | 11,141                   |
| 1992                        | 810,687.74              | 471,172                      | 488,417                       | 322,271                        | 19.04               | 16,926                   |
| 1993                        | 941,499.93              | 533,642                      | 553,173                       | 388,327                        | 19.43               | 19,986                   |
| 1994                        | 388,861.61              | 214,574                      | 222,427                       | 166,435                        | 19.83               | 8,393                    |
| 1995                        | 8,123.40                | 4,356                        | 4,515                         | 3,608                          | 20.25               | 178                      |
| 1996                        | 1,733,369.00            | 901,525                      | 934,521                       | 798,848                        | 20.69               | 38,610                   |
| 1997                        | 736,545.89              | 370,704                      | 384,272                       | 352,274                        | 21.14               | 16,664                   |
| 1998                        | 1,054,525.37            | 512,394                      | 531,148                       | 523,377                        | 21.60               | 24,230                   |
| 1999                        | 1,202,886.90            | 562,831                      | 583,431                       | 619,456                        | 22.08               | 28,055                   |
| 2000                        | 42,612.12               | 19,150                       | 19,851                        | 22,761                         | 22.57               | 1,008                    |
| 2001                        | 482,014.25              | 207,363                      | 214,953                       | 267,061                        | 23.07               | 11,576                   |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR<br>(1)                                                       | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 44-S1                                       |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                           |                         |                              |                               |                                |                     |                          |
| 2002                                                              | 1,153,857.56            | 473,543                      | 490,875                       | 662,983                        | 23.58               | 28,116                   |
| 2003                                                              | 852,710.51              | 333,921                      | 346,143                       | 506,568                        | 23.95               | 21,151                   |
| 2004                                                              | 1,144,445.84            | 424,017                      | 439,536                       | 704,910                        | 24.49               | 28,784                   |
| 2005                                                              | 504,905.23              | 176,111                      | 182,557                       | 322,348                        | 25.05               | 12,868                   |
| 2006                                                              | 508,857.32              | 166,193                      | 172,276                       | 336,581                        | 25.60               | 13,148                   |
| 2007                                                              | 1,038,415.37            | 315,367                      | 326,909                       | 711,506                        | 26.18               | 27,177                   |
| 2008                                                              | 1,073,154.49            | 300,698                      | 311,703                       | 761,451                        | 26.76               | 28,455                   |
| 2009                                                              | 1,413,043.37            | 361,880                      | 375,125                       | 1,037,918                      | 27.35               | 37,949                   |
| 2010                                                              | 1,113,481.78            | 257,771                      | 267,205                       | 846,277                        | 27.95               | 30,278                   |
| 2011                                                              | 1,052,668.38            | 216,218                      | 224,132                       | 828,536                        | 28.69               | 28,879                   |
| 2012                                                              | 1,351,841.26            | 242,926                      | 251,817                       | 1,100,024                      | 29.30               | 37,543                   |
| 2013                                                              | 1,305,248.21            | 199,442                      | 206,742                       | 1,098,506                      | 30.04               | 36,568                   |
| 2014                                                              | 1,137,073.74            | 142,589                      | 147,808                       | 989,266                        | 30.80               | 32,119                   |
| 2015                                                              | 2,513,581.52            | 245,577                      | 254,565                       | 2,259,017                      | 31.55               | 71,601                   |
| 2016                                                              | 1,268,208.45            | 88,267                       | 91,497                        | 1,176,711                      | 32.31               | 36,419                   |
| 2017                                                              | 1,252,264.83            | 52,720                       | 54,649                        | 1,197,616                      | 33.15               | 36,127                   |
| 2018                                                              | 905,386.00              | 10,865                       | 11,263                        | 894,123                        | 34.19               | 26,152                   |
|                                                                   | 38,642,926.60           | 15,989,004                   | 16,573,233                    | 22,069,694                     |                     | 920,673                  |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 24.0 |                         |                              |                               |                                |                     | 2.38                     |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381.1 METERS - AMR

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR<br>(1)                                                      | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 15-S2.5                                    |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                          |                         |                              |                               |                                |                     |                          |
| 2000                                                             | 296,427.01              | 265,865                      | 265,796                       | 30,631                         | 2.12                | 14,449                   |
| 2001                                                             | 278,746.25              | 245,659                      | 245,596                       | 33,150                         | 2.35                | 14,106                   |
| 2003                                                             | 514.10                  | 432                          | 432                           | 82                             | 2.93                | 28                       |
| 2004                                                             | 107,825.28              | 87,985                       | 87,962                        | 19,863                         | 3.25                | 6,112                    |
| 2005                                                             | 169,036.06              | 133,133                      | 133,099                       | 35,937                         | 3.62                | 9,927                    |
| 2007                                                             | 107,411.45              | 77,132                       | 77,112                        | 30,299                         | 4.48                | 6,763                    |
| 2008                                                             | 485,486.24              | 328,189                      | 328,104                       | 157,382                        | 4.99                | 31,539                   |
| 2009                                                             | 420,783.25              | 264,673                      | 264,605                       | 156,178                        | 5.55                | 28,140                   |
| 2010                                                             | 824,868.47              | 475,537                      | 475,414                       | 349,454                        | 6.18                | 56,546                   |
| 2011                                                             | 11,263,089.05           | 5,847,796                    | 5,846,289                     | 5,416,800                      | 6.87                | 788,472                  |
| 2012                                                             | 8,735,379.14            | 3,991,195                    | 3,990,167                     | 4,745,212                      | 7.63                | 621,915                  |
| 2014                                                             | 306,936.92              | 98,680                       | 98,655                        | 208,282                        | 9.32                | 22,348                   |
| 2015                                                             | 372,440.91              | 93,259                       | 93,235                        | 279,206                        | 10.23               | 27,293                   |
| 2016                                                             | 392,723.42              | 69,748                       | 69,730                        | 322,993                        | 11.19               | 28,864                   |
| 2017                                                             | 189,201.48              | 20,301                       | 20,295                        | 168,906                        | 12.13               | 13,925                   |
| 2018                                                             | 159,777.00              | 4,905                        | 4,904                         | 154,873                        | 13.17               | 11,760                   |
|                                                                  | 24,110,646.03           | 12,004,489                   | 12,001,395                    | 12,109,251                     |                     | 1,682,187                |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.2 |                         |                              |                               |                                |                     | 6.98                     |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 382 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR<br>(1)                 | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 55-R3 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1937                        | 4,133.95                | 3,923                        | 4,134                         |                                |                     |                          |
| 1938                        | 9,574.08                | 9,043                        | 9,558                         | 16                             | 3.05                | 5                        |
| 1939                        | 7,247.78                | 6,812                        | 7,200                         | 48                             | 3.31                | 15                       |
| 1940                        | 6,503.64                | 6,081                        | 6,427                         | 77                             | 3.57                | 22                       |
| 1941                        | 9,403.98                | 8,751                        | 9,250                         | 154                            | 3.82                | 40                       |
| 1942                        | 7,144.71                | 6,615                        | 6,992                         | 153                            | 4.08                | 38                       |
| 1943                        | 3,277.15                | 3,019                        | 3,191                         | 86                             | 4.34                | 20                       |
| 1944                        | 3,344.41                | 3,065                        | 3,240                         | 104                            | 4.60                | 23                       |
| 1945                        | 4,482.11                | 4,086                        | 4,319                         | 163                            | 4.86                | 34                       |
| 1946                        | 10,950.81               | 9,931                        | 10,497                        | 454                            | 5.12                | 89                       |
| 1947                        | 16,075.13               | 14,503                       | 15,329                        | 746                            | 5.38                | 139                      |
| 1948                        | 20,580.17               | 18,466                       | 19,518                        | 1,062                          | 5.65                | 188                      |
| 1949                        | 26,751.00               | 23,872                       | 25,232                        | 1,519                          | 5.92                | 257                      |
| 1950                        | 31,305.24               | 27,776                       | 29,358                        | 1,947                          | 6.20                | 314                      |
| 1951                        | 27,474.83               | 24,238                       | 25,619                        | 1,856                          | 6.48                | 286                      |
| 1952                        | 28,791.63               | 25,242                       | 26,680                        | 2,112                          | 6.78                | 312                      |
| 1953                        | 34,641.32               | 30,176                       | 31,895                        | 2,746                          | 7.09                | 387                      |
| 1954                        | 32,722.96               | 28,320                       | 29,933                        | 2,790                          | 7.40                | 377                      |
| 1955                        | 41,302.30               | 35,497                       | 37,519                        | 3,783                          | 7.73                | 489                      |
| 1956                        | 43,827.24               | 37,396                       | 39,527                        | 4,300                          | 8.07                | 533                      |
| 1957                        | 40,488.52               | 34,283                       | 36,236                        | 4,253                          | 8.43                | 505                      |
| 1958                        | 52,342.22               | 43,967                       | 46,472                        | 5,870                          | 8.80                | 667                      |
| 1959                        | 63,683.77               | 53,043                       | 56,065                        | 7,619                          | 9.19                | 829                      |
| 1960                        | 46,617.66               | 38,489                       | 40,682                        | 5,936                          | 9.59                | 619                      |
| 1961                        | 40,551.39               | 33,171                       | 35,061                        | 5,490                          | 10.01               | 548                      |
| 1962                        | 58,225.48               | 47,163                       | 49,850                        | 8,375                          | 10.45               | 801                      |
| 1963                        | 62,240.02               | 49,905                       | 52,748                        | 9,492                          | 10.90               | 871                      |
| 1964                        | 112,015.44              | 88,858                       | 93,921                        | 18,094                         | 11.37               | 1,591                    |
| 1965                        | 149,164.40              | 116,999                      | 123,665                       | 25,499                         | 11.86               | 2,150                    |
| 1966                        | 138,647.11              | 107,464                      | 113,587                       | 25,060                         | 12.37               | 2,026                    |
| 1967                        | 128,053.17              | 98,043                       | 103,629                       | 24,424                         | 12.89               | 1,895                    |
| 1968                        | 165,004.21              | 124,713                      | 131,818                       | 33,186                         | 13.43               | 2,471                    |
| 1969                        | 156,552.86              | 116,732                      | 123,383                       | 33,170                         | 13.99               | 2,371                    |
| 1970                        | 143,790.87              | 105,725                      | 111,748                       | 32,043                         | 14.56               | 2,201                    |
| 1971                        | 125,865.70              | 91,196                       | 96,392                        | 29,474                         | 15.15               | 1,945                    |
| 1972                        | 79,287.23               | 56,567                       | 59,790                        | 19,497                         | 15.76               | 1,237                    |
| 1973                        | 73,797.43               | 51,819                       | 54,771                        | 19,026                         | 16.38               | 1,162                    |
| 1974                        | 13,249.84               | 9,152                        | 9,673                         | 3,577                          | 17.01               | 210                      |
| 1975                        | 23,750.11               | 16,124                       | 17,043                        | 6,707                          | 17.66               | 380                      |
| 1976                        | 44,495.71               | 31,895                       | 33,712                        | 10,784                         | 16.76               | 643                      |
| 1977                        | 50,465.24               | 35,739                       | 37,775                        | 12,690                         | 17.06               | 744                      |
| 1978                        | 49,026.76               | 34,083                       | 36,025                        | 13,002                         | 17.72               | 734                      |
| 1979                        | 117,253.11              | 79,955                       | 84,510                        | 32,743                         | 18.39               | 1,780                    |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 382 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR<br>(1)                 | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 55-R3 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1980                        | 283,313.24              | 189,367                      | 200,156                       | 83,157                         | 19.06               | 4,363                    |
| 1981                        | 387,165.41              | 253,516                      | 267,960                       | 119,205                        | 19.73               | 6,042                    |
| 1982                        | 303,748.98              | 194,673                      | 205,764                       | 97,985                         | 20.40               | 4,803                    |
| 1983                        | 356,467.28              | 223,469                      | 236,201                       | 120,266                        | 21.08               | 5,705                    |
| 1984                        | 432,020.65              | 266,168                      | 281,332                       | 150,689                        | 21.45               | 7,025                    |
| 1985                        | 449,492.64              | 270,370                      | 285,774                       | 163,719                        | 22.14               | 7,395                    |
| 1986                        | 523,065.53              | 306,883                      | 324,367                       | 198,699                        | 22.83               | 8,703                    |
| 1987                        | 588,453.50              | 336,478                      | 355,648                       | 232,806                        | 23.53               | 9,894                    |
| 1988                        | 673,449.55              | 374,842                      | 396,198                       | 277,252                        | 24.23               | 11,443                   |
| 1989                        | 768,777.67              | 416,139                      | 439,848                       | 328,930                        | 24.93               | 13,194                   |
| 1990                        | 780,071.71              | 410,084                      | 433,448                       | 346,624                        | 25.64               | 13,519                   |
| 1991                        | 700,397.00              | 357,202                      | 377,553                       | 322,844                        | 26.34               | 12,257                   |
| 1992                        | 764,394.77              | 377,611                      | 399,125                       | 365,270                        | 27.06               | 13,499                   |
| 1993                        | 647,966.02              | 309,598                      | 327,237                       | 320,729                        | 27.78               | 11,545                   |
| 1994                        | 750,953.55              | 346,565                      | 366,310                       | 384,644                        | 28.49               | 13,501                   |
| 1995                        | 662,040.30              | 294,542                      | 311,323                       | 350,717                        | 29.22               | 12,003                   |
| 1996                        | 755,049.15              | 323,312                      | 341,732                       | 413,317                        | 29.94               | 13,805                   |
| 1997                        | 722,235.19              | 296,983                      | 313,903                       | 408,332                        | 30.67               | 13,314                   |
| 1998                        | 619,749.44              | 244,181                      | 258,093                       | 361,656                        | 31.40               | 11,518                   |
| 1999                        | 520,754.88              | 196,168                      | 207,344                       | 313,411                        | 32.13               | 9,754                    |
| 2000                        | 1,146,925.03            | 411,861                      | 435,326                       | 711,599                        | 32.87               | 21,649                   |
| 2001                        | 1,029,890.48            | 351,605                      | 371,637                       | 658,253                        | 33.60               | 19,591                   |
| 2002                        | 1,003,059.36            | 322,785                      | 341,175                       | 661,884                        | 34.60               | 19,130                   |
| 2003                        | 1,101,002.17            | 334,374                      | 353,424                       | 747,578                        | 35.35               | 21,148                   |
| 2004                        | 1,071,592.82            | 305,833                      | 323,257                       | 748,336                        | 36.09               | 20,735                   |
| 2005                        | 768,337.84              | 205,146                      | 216,834                       | 551,504                        | 36.83               | 14,974                   |
| 2006                        | 215,115.63              | 53,413                       | 56,456                        | 158,660                        | 37.58               | 4,222                    |
| 2007                        | 2,949,718.10            | 676,960                      | 715,529                       | 2,234,189                      | 38.33               | 58,288                   |
| 2008                        | 1,422,073.73            | 299,204                      | 316,251                       | 1,105,823                      | 39.09               | 28,289                   |
| 2009                        | 1,838,636.43            | 349,709                      | 369,633                       | 1,469,003                      | 40.09               | 36,643                   |
| 2010                        | 1,433,672.64            | 245,015                      | 258,974                       | 1,174,699                      | 40.84               | 28,763                   |
| 2011                        | 1,565,426.96            | 236,849                      | 250,343                       | 1,315,084                      | 41.60               | 31,613                   |
| 2012                        | 1,664,142.87            | 218,835                      | 231,303                       | 1,432,840                      | 42.37               | 33,817                   |
| 2013                        | 1,027,916.74            | 114,716                      | 121,252                       | 906,665                        | 43.13               | 21,022                   |
| 2014                        | 1,230,544.01            | 112,472                      | 118,880                       | 1,111,664                      | 43.89               | 25,328                   |
| 2015                        | 1,353,034.35            | 96,201                       | 101,682                       | 1,251,352                      | 44.66               | 28,020                   |
| 2016                        | 1,383,437.00            | 69,864                       | 73,844                        | 1,309,593                      | 45.43               | 28,827                   |
| 2017                        | 1,955,580.23            | 60,232                       | 63,663                        | 1,891,917                      | 45.93               | 41,191                   |
| 2018                        | 2,239,040.00            | 20,151                       | 21,299                        | 2,217,741                      | 46.09               | 48,118                   |
|                             | 40,392,815.54           | 12,265,273                   | 12,964,052                    | 27,428,764                     |                     | 766,598                  |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 35.8 1.90

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 383 HOUSE REGULATORS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR<br>(1)                 | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 45-S2 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1939                        | 8.97                    | 9                            | 9                             |                                |                     |                          |
| 1949                        | 64.73                   | 59                           | 65                            |                                |                     |                          |
| 1955                        | 381.46                  | 334                          | 381                           |                                |                     |                          |
| 1957                        | 437.98                  | 379                          | 438                           |                                |                     |                          |
| 1958                        | 632.04                  | 543                          | 632                           |                                |                     |                          |
| 1960                        | 321.33                  | 272                          | 321                           |                                |                     |                          |
| 1961                        | 842.71                  | 708                          | 839                           | 4                              | 7.20                | 1                        |
| 1962                        | 6,462.05                | 5,387                        | 6,386                         | 76                             | 7.49                | 10                       |
| 1963                        | 10,412.55               | 8,610                        | 10,207                        | 206                            | 7.79                | 26                       |
| 1964                        | 14,824.25               | 12,156                       | 14,411                        | 413                            | 8.10                | 51                       |
| 1965                        | 18,619.03               | 15,135                       | 17,943                        | 676                            | 8.42                | 80                       |
| 1966                        | 47,430.02               | 38,218                       | 45,308                        | 2,122                          | 8.74                | 243                      |
| 1967                        | 37,020.82               | 29,559                       | 35,042                        | 1,979                          | 9.07                | 218                      |
| 1968                        | 48,806.80               | 38,601                       | 45,762                        | 3,045                          | 9.41                | 324                      |
| 1969                        | 44,837.12               | 35,112                       | 41,625                        | 3,212                          | 9.76                | 329                      |
| 1970                        | 48,802.76               | 37,838                       | 44,857                        | 3,946                          | 10.11               | 390                      |
| 1971                        | 41,304.80               | 31,685                       | 37,563                        | 3,742                          | 10.48               | 357                      |
| 1972                        | 23,923.04               | 18,155                       | 21,523                        | 2,400                          | 10.85               | 221                      |
| 1973                        | 21,170.23               | 15,882                       | 18,828                        | 2,342                          | 11.24               | 208                      |
| 1974                        | 2,374.17                | 1,760                        | 2,086                         | 288                            | 11.64               | 25                       |
| 1975                        | 1,957.00                | 1,433                        | 1,699                         | 258                            | 12.05               | 21                       |
| 1976                        | 3,682.02                | 2,905                        | 3,444                         | 238                            | 11.34               | 21                       |
| 1977                        | 4,007.74                | 3,137                        | 3,719                         | 289                            | 11.49               | 25                       |
| 1978                        | 6,137.38                | 4,738                        | 5,617                         | 520                            | 11.94               | 44                       |
| 1979                        | 13,666.35               | 10,396                       | 12,324                        | 1,342                          | 12.40               | 108                      |
| 1980                        | 27,133.02               | 20,431                       | 24,221                        | 2,912                          | 12.60               | 231                      |
| 1981                        | 44,863.95               | 33,235                       | 39,400                        | 5,464                          | 13.09               | 417                      |
| 1982                        | 42,730.05               | 31,120                       | 36,893                        | 5,837                          | 13.58               | 430                      |
| 1983                        | 44,273.34               | 31,833                       | 37,738                        | 6,535                          | 13.84               | 472                      |
| 1984                        | 48,784.03               | 34,417                       | 40,801                        | 7,983                          | 14.37               | 556                      |
| 1985                        | 49,811.69               | 34,624                       | 41,047                        | 8,765                          | 14.66               | 598                      |
| 1986                        | 64,698.58               | 44,047                       | 52,218                        | 12,481                         | 15.20               | 821                      |
| 1987                        | 70,371.76               | 46,868                       | 55,562                        | 14,810                         | 15.75               | 940                      |
| 1988                        | 87,122.87               | 56,978                       | 67,548                        | 19,575                         | 16.09               | 1,217                    |
| 1989                        | 93,614.88               | 59,754                       | 70,838                        | 22,777                         | 16.67               | 1,366                    |
| 1990                        | 91,120.70               | 56,969                       | 67,537                        | 23,584                         | 17.04               | 1,384                    |
| 1991                        | 75,931.79               | 46,212                       | 54,784                        | 21,148                         | 17.63               | 1,200                    |
| 1992                        | 83,342.98               | 49,314                       | 58,462                        | 24,881                         | 18.23               | 1,365                    |
| 1993                        | 60,007.38               | 34,468                       | 40,862                        | 19,145                         | 18.83               | 1,017                    |
| 1994                        | 72,595.98               | 40,588                       | 48,117                        | 24,479                         | 19.25               | 1,272                    |
| 1995                        | 80,959.44               | 43,791                       | 51,914                        | 29,045                         | 19.87               | 1,462                    |
| 1996                        | 85,622.01               | 44,720                       | 53,016                        | 32,606                         | 20.50               | 1,591                    |
| 1997                        | 98,988.54               | 49,821                       | 59,063                        | 39,926                         | 21.14               | 1,889                    |



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 383 HOUSE REGULATORS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR<br>(1)                                                  | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|--------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 45-S2                                  |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                      |                         |                              |                               |                                |                     |                          |
| 1998                                                         | 36,472.26               | 17,649                       | 20,923                        | 15,549                         | 21.78               | 714                      |
| 1999                                                         | 19,138.34               | 8,882                        | 10,530                        | 8,608                          | 22.42               | 384                      |
| 2000                                                         | 179,225.61              | 79,218                       | 93,913                        | 85,313                         | 23.25               | 3,669                    |
| 2001                                                         | 69,609.72               | 29,340                       | 34,783                        | 34,827                         | 23.90               | 1,457                    |
| 2002                                                         | 378,020.32              | 150,792                      | 178,764                       | 199,256                        | 24.74               | 8,054                    |
| 2003                                                         | 546,388.47              | 206,371                      | 244,653                       | 301,735                        | 25.40               | 11,879                   |
| 2004                                                         | 898,841.33              | 318,729                      | 377,854                       | 520,987                        | 26.24               | 19,855                   |
| 2005                                                         | 719,140.17              | 238,323                      | 282,532                       | 436,608                        | 27.07               | 16,129                   |
| 2006                                                         | 426,253.74              | 131,244                      | 155,590                       | 270,664                        | 27.91               | 9,698                    |
| 2007                                                         | 856,482.10              | 243,498                      | 288,667                       | 567,815                        | 28.74               | 19,757                   |
| 2008                                                         | 554,005.44              | 144,263                      | 171,024                       | 382,981                        | 29.58               | 12,947                   |
| 2009                                                         | 785,619.78              | 185,721                      | 220,173                       | 565,447                        | 30.42               | 18,588                   |
| 2010                                                         | 623,619.67              | 131,771                      | 156,215                       | 467,405                        | 31.42               | 14,876                   |
| 2011                                                         | 700,242.86              | 130,385                      | 154,572                       | 545,671                        | 32.42               | 16,831                   |
| 2012                                                         | 687,829.15              | 111,222                      | 131,854                       | 555,975                        | 33.27               | 16,711                   |
| 2013                                                         | 507,705.92              | 69,302                       | 82,157                        | 425,549                        | 34.27               | 12,418                   |
| 2014                                                         | 641,612.00              | 71,411                       | 84,658                        | 556,954                        | 35.27               | 15,791                   |
| 2015                                                         | 543,525.79              | 46,798                       | 55,479                        | 488,047                        | 36.27               | 13,456                   |
| 2016                                                         | 545,648.98              | 33,230                       | 39,394                        | 506,255                        | 37.27               | 13,583                   |
| 2017                                                         | 688,738.37              | 25,346                       | 30,048                        | 658,690                        | 38.22               | 17,234                   |
| 2018                                                         | 573,542.00              | 6,022                        | 7,139                         | 566,403                        | 39.27               | 14,423                   |
|                                                              | 12,601,762.36           | 3,451,718                    | 4,091,972                     | 8,509,790                      |                     | 279,384                  |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. |                         |                              |                               |                                |                     | 30.5 2.22                |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 384 HOUSE REGULATOR INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR<br>(1)                 | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 45-S2 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1956                        | 4,098.01                | 3,568                        | 4,098                         |                                |                     |                          |
| 1957                        | 11,093.12               | 9,594                        | 11,093                        |                                |                     |                          |
| 1958                        | 8,984.62                | 7,717                        | 8,985                         |                                |                     |                          |
| 1959                        | 10,504.99               | 8,957                        | 10,505                        |                                |                     |                          |
| 1960                        | 6,886.85                | 5,829                        | 6,887                         |                                |                     |                          |
| 1961                        | 5,770.97                | 4,848                        | 5,771                         |                                |                     |                          |
| 1962                        | 6,336.36                | 5,282                        | 6,336                         |                                |                     |                          |
| 1963                        | 9,429.02                | 7,797                        | 9,429                         |                                |                     |                          |
| 1964                        | 13,020.68               | 10,677                       | 13,021                        |                                |                     |                          |
| 1965                        | 14,473.42               | 11,765                       | 14,473                        |                                |                     |                          |
| 1966                        | 13,305.16               | 10,721                       | 13,305                        |                                |                     |                          |
| 1967                        | 17,106.02               | 13,658                       | 17,106                        |                                |                     |                          |
| 1968                        | 26,484.46               | 20,946                       | 26,484                        |                                |                     |                          |
| 1969                        | 37,452.06               | 29,329                       | 37,452                        |                                |                     |                          |
| 1970                        | 54,867.42               | 42,540                       | 54,867                        |                                |                     |                          |
| 1971                        | 52,330.89               | 40,144                       | 52,331                        |                                |                     |                          |
| 1972                        | 30,594.70               | 23,218                       | 30,595                        |                                |                     |                          |
| 1973                        | 41,286.72               | 30,974                       | 41,287                        |                                |                     |                          |
| 1974                        | 15,958.45               | 11,830                       | 15,934                        | 24                             | 11.64               | 2                        |
| 1975                        | 25,717.11               | 18,831                       | 25,364                        | 353                            | 12.05               | 29                       |
| 1976                        | 13,626.03               | 10,751                       | 13,626                        |                                |                     |                          |
| 1978                        | 1,304.20                | 1,007                        | 1,304                         |                                |                     |                          |
| 1979                        | 41,749.48               | 31,759                       | 41,749                        |                                |                     |                          |
| 1980                        | 78,231.18               | 58,908                       | 78,231                        |                                |                     |                          |
| 1981                        | 103,540.67              | 76,703                       | 103,439                       | 102                            | 13.09               | 8                        |
| 1982                        | 111,541.38              | 81,236                       | 109,552                       | 1,989                          | 13.58               | 146                      |
| 1983                        | 94,279.56               | 67,787                       | 91,415                        | 2,865                          | 13.84               | 207                      |
| 1984                        | 100,051.83              | 70,587                       | 95,191                        | 4,861                          | 14.37               | 338                      |
| 1985                        | 116,774.98              | 81,170                       | 109,463                       | 7,312                          | 14.66               | 499                      |
| 1986                        | 125,389.90              | 85,365                       | 115,120                       | 10,270                         | 15.20               | 676                      |
| 1987                        | 160,772.64              | 107,075                      | 144,397                       | 16,376                         | 15.75               | 1,040                    |
| 1988                        | 175,315.37              | 114,656                      | 154,621                       | 20,694                         | 16.09               | 1,286                    |
| 1989                        | 145,310.01              | 92,751                       | 125,081                       | 20,229                         | 16.67               | 1,213                    |
| 1990                        | 142,228.97              | 88,922                       | 119,917                       | 22,312                         | 17.04               | 1,309                    |
| 1991                        | 135,142.11              | 82,247                       | 110,915                       | 24,227                         | 17.63               | 1,374                    |
| 1992                        | 132,043.34              | 78,130                       | 105,363                       | 26,680                         | 18.23               | 1,464                    |
| 1993                        | 112,250.88              | 64,477                       | 86,951                        | 25,300                         | 18.83               | 1,344                    |
| 1994                        | 183,968.70              | 102,857                      | 138,709                       | 45,260                         | 19.25               | 2,351                    |
| 1995                        | 147,476.46              | 79,770                       | 107,575                       | 39,901                         | 19.87               | 2,008                    |
| 1996                        | 122,299.49              | 63,877                       | 86,142                        | 36,157                         | 20.50               | 1,764                    |
| 1997                        | 182,246.23              | 91,725                       | 123,697                       | 58,549                         | 21.14               | 2,770                    |
| 1998                        | 181,143.04              | 87,655                       | 118,209                       | 62,934                         | 21.78               | 2,890                    |
| 1999                        | 139,857.78              | 64,908                       | 87,533                        | 52,325                         | 22.42               | 2,334                    |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 384 HOUSE REGULATOR INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR<br>(1)                                                       | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 45-S2                                       |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                           |                         |                              |                               |                                |                     |                          |
| 2000                                                              | 194,710.12              | 86,062                       | 116,060                       | 78,650                         | 23.25               | 3,383                    |
| 2001                                                              | 229,158.59              | 96,590                       | 130,258                       | 98,901                         | 23.90               | 4,138                    |
| 2002                                                              | 154,765.04              | 61,736                       | 83,255                        | 71,510                         | 24.74               | 2,890                    |
| 2003                                                              | 133,893.06              | 50,571                       | 68,198                        | 65,695                         | 25.40               | 2,586                    |
|                                                                   | 3,864,772.07            | 2,297,507                    | 3,071,294                     | 793,478                        |                     | 38,049                   |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 20.9 |                         |                              |                               |                                |                     | 0.98                     |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING EQUIPMENT - OTHER THAN METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR<br>(1)                   | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 30-R0.5 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0       |                         |                              |                               |                                |                     |                          |
| 1935                          | 50.01                   | 50                           | 50                            |                                |                     |                          |
| 1937                          | 848.63                  | 849                          | 849                           |                                |                     |                          |
| 1938                          | 173.15                  | 173                          | 173                           |                                |                     |                          |
| 1939                          | 222.50                  | 222                          | 222                           |                                |                     |                          |
| 1941                          | 320.05                  | 320                          | 320                           |                                |                     |                          |
| 1942                          | 584.26                  | 584                          | 584                           |                                |                     |                          |
| 1943                          | 3,592.90                | 3,593                        | 3,593                         |                                |                     |                          |
| 1944                          | 860.51                  | 861                          | 861                           |                                |                     |                          |
| 1945                          | 605.93                  | 606                          | 606                           |                                |                     |                          |
| 1946                          | 52.16                   | 52                           | 52                            |                                |                     |                          |
| 1947                          | 741.70                  | 742                          | 742                           |                                |                     |                          |
| 1948                          | 1,212.16                | 1,212                        | 1,212                         |                                |                     |                          |
| 1950                          | 1,669.53                | 1,670                        | 1,670                         |                                |                     |                          |
| 1951                          | 4,250.39                | 4,250                        | 4,250                         |                                |                     |                          |
| 1952                          | 3,800.56                | 3,801                        | 3,801                         |                                |                     |                          |
| 1953                          | 4,027.89                | 4,028                        | 4,028                         |                                |                     |                          |
| 1954                          | 12,075.65               | 12,076                       | 12,076                        |                                |                     |                          |
| 1955                          | 22,437.57               | 22,438                       | 22,438                        |                                |                     |                          |
| 1956                          | 21,069.91               | 21,070                       | 21,070                        |                                |                     |                          |
| 1957                          | 25,524.84               | 25,525                       | 25,525                        |                                |                     |                          |
| 1958                          | 23,584.51               | 23,585                       | 23,585                        |                                |                     |                          |
| 1959                          | 21,424.21               | 21,217                       | 18,284                        | 3,140                          | 0.29                | 3,140                    |
| 1960                          | 24,308.06               | 23,676                       | 20,403                        | 3,905                          | 0.78                | 3,905                    |
| 1961                          | 30,731.21               | 29,440                       | 25,370                        | 5,361                          | 1.26                | 4,255                    |
| 1962                          | 12,522.05               | 11,800                       | 10,169                        | 2,353                          | 1.73                | 1,360                    |
| 1963                          | 34,891.09               | 32,344                       | 27,872                        | 7,019                          | 2.19                | 3,205                    |
| 1964                          | 25,000.75               | 22,801                       | 19,649                        | 5,352                          | 2.64                | 2,027                    |
| 1965                          | 30,977.61               | 27,797                       | 23,954                        | 7,024                          | 3.08                | 2,281                    |
| 1966                          | 26,957.44               | 23,803                       | 20,512                        | 6,445                          | 3.51                | 1,836                    |
| 1967                          | 49,331.33               | 42,885                       | 36,956                        | 12,375                         | 3.92                | 3,157                    |
| 1968                          | 48,625.81               | 41,608                       | 35,856                        | 12,770                         | 4.33                | 2,949                    |
| 1969                          | 49,200.53               | 41,427                       | 35,700                        | 13,501                         | 4.74                | 2,848                    |
| 1970                          | 44,007.85               | 36,468                       | 31,426                        | 12,582                         | 5.14                | 2,448                    |
| 1971                          | 100,297.31              | 81,775                       | 70,470                        | 29,827                         | 5.54                | 5,384                    |
| 1972                          | 75,159.08               | 60,302                       | 51,965                        | 23,194                         | 5.93                | 3,911                    |
| 1973                          | 40,210.70               | 31,726                       | 27,340                        | 12,871                         | 6.33                | 2,033                    |
| 1974                          | 25,772.31               | 19,999                       | 17,234                        | 8,538                          | 6.72                | 1,271                    |
| 1975                          | 24,150.65               | 18,419                       | 15,873                        | 8,278                          | 7.12                | 1,163                    |
| 1976                          | 717.52                  | 615                          | 530                           | 188                            | 7.09                | 27                       |
| 1977                          | 2,817.20                | 2,392                        | 2,061                         | 756                            | 7.37                | 103                      |
| 1978                          | 10,947.52               | 9,204                        | 7,932                         | 3,016                          | 7.66                | 394                      |
| 1979                          | 34,678.70               | 28,842                       | 24,855                        | 9,824                          | 7.98                | 1,231                    |
| 1980                          | 66,569.05               | 54,473                       | 46,942                        | 19,627                         | 8.53                | 2,301                    |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING EQUIPMENT - OTHER THAN METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR<br>(1)                   | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 30-R0.5 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0       |                         |                              |                               |                                |                     |                          |
| 1981                          | 102,912.55              | 83,174                       | 71,675                        | 31,238                         | 8.88                | 3,518                    |
| 1982                          | 108,446.87              | 86,486                       | 74,529                        | 33,918                         | 9.25                | 3,667                    |
| 1983                          | 70,848.98               | 55,957                       | 48,221                        | 22,628                         | 9.43                | 2,400                    |
| 1984                          | 32,345.08               | 25,158                       | 21,680                        | 10,665                         | 9.83                | 1,085                    |
| 1985                          | 41,257.22               | 31,570                       | 27,205                        | 14,052                         | 10.25               | 1,371                    |
| 1986                          | 83,502.04               | 63,069                       | 54,350                        | 29,152                         | 10.50               | 2,776                    |
| 1987                          | 19,416.44               | 14,395                       | 12,405                        | 7,011                          | 10.96               | 640                      |
| 1988                          | 56,351.45               | 41,137                       | 35,450                        | 20,901                         | 11.25               | 1,858                    |
| 1989                          | 68,928.66               | 49,270                       | 42,458                        | 26,471                         | 11.74               | 2,255                    |
| 1990                          | 67,548.12               | 47,412                       | 40,857                        | 26,691                         | 12.07               | 2,211                    |
| 1991                          | 113,577.04              | 78,164                       | 67,358                        | 46,219                         | 12.42               | 3,721                    |
| 1992                          | 89,279.75               | 60,139                       | 51,825                        | 37,455                         | 12.80               | 2,926                    |
| 1993                          | 118,598.11              | 78,073                       | 67,280                        | 51,318                         | 13.19               | 3,891                    |
| 1994                          | 178,652.62              | 115,159                      | 99,238                        | 79,415                         | 13.46               | 5,900                    |
| 1995                          | 124,450.02              | 78,105                       | 67,307                        | 57,143                         | 13.90               | 4,111                    |
| 1996                          | 177,966.92              | 108,916                      | 93,859                        | 84,108                         | 14.21               | 5,919                    |
| 1997                          | 106,118.63              | 63,183                       | 54,448                        | 51,671                         | 14.55               | 3,551                    |
| 1998                          | 117,244.75              | 67,744                       | 58,379                        | 58,866                         | 14.92               | 3,945                    |
| 1999                          | 54,307.71               | 30,369                       | 26,171                        | 28,137                         | 15.31               | 1,838                    |
| 2000                          | 161,037.54              | 87,186                       | 75,133                        | 85,905                         | 15.60               | 5,507                    |
| 2001                          | 13,125.91               | 6,858                        | 5,910                         | 7,216                          | 15.92               | 453                      |
| 2002                          | 230,349.80              | 115,728                      | 99,729                        | 130,621                        | 16.26               | 8,033                    |
| 2003                          | 474,716.02              | 229,050                      | 197,384                       | 277,332                        | 16.53               | 16,777                   |
| 2004                          | 13,576.13               | 6,263                        | 5,397                         | 8,179                          | 16.83               | 486                      |
| 2005                          | 56,245.11               | 24,675                       | 21,264                        | 34,981                         | 17.17               | 2,037                    |
| 2006                          | 150,676.55              | 62,681                       | 54,015                        | 96,662                         | 17.43               | 5,546                    |
| 2007                          | 205,593.14              | 80,736                       | 69,574                        | 136,019                        | 17.65               | 7,706                    |
| 2008                          | 230,331.05              | 84,946                       | 73,202                        | 157,129                        | 17.83               | 8,813                    |
| 2009                          | 179,851.34              | 61,815                       | 53,269                        | 126,582                        | 17.98               | 7,040                    |
| 2010                          | 262,843.52              | 83,637                       | 72,074                        | 190,770                        | 18.04               | 10,575                   |
| 2011                          | 231,194.36              | 67,208                       | 57,917                        | 173,277                        | 18.09               | 9,579                    |
| 2012                          | 203,041.40              | 53,156                       | 45,807                        | 157,234                        | 18.09               | 8,692                    |
| 2013                          | 294,683.91              | 68,160                       | 58,737                        | 235,947                        | 18.00               | 13,108                   |
| 2014                          | 198,584.82              | 39,479                       | 34,021                        | 164,564                        | 17.80               | 9,245                    |
| 2015                          | 308,624.57              | 50,614                       | 43,617                        | 265,008                        | 17.42               | 15,213                   |
| 2016                          | 554,349.31              | 69,959                       | 60,287                        | 494,062                        | 16.74               | 29,514                   |
| 2017                          | 652,389.04              | 55,649                       | 47,956                        | 604,433                        | 15.64               | 38,647                   |
| 2018                          | 1,102,033.00            | 34,604                       | 29,820                        | 1,072,213                      | 12.85               | 83,441                   |
|                               | 8,162,002.27            | 3,250,604                    | 2,818,868                     | 5,343,134                      |                     | 389,224                  |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 13.7 4.77

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 387 OTHER EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR<br>(1)                   | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 32-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                | 4,249                        | 4,288                         |                                |                     |                          |
| 1957                          | 14,374.70               | 13,809                       | 14,375                        |                                |                     |                          |
| 1959                          | 188.29                  | 175                          | 185                           | 3                              | 2.20                | 1                        |
| 1962                          | 7,626.48                | 6,785                        | 7,177                         | 449                            | 3.53                | 127                      |
| 1967                          | 445.13                  | 368                          | 389                           | 56                             | 5.57                | 10                       |
| 1972                          | 7,910.24                | 6,041                        | 6,390                         | 1,520                          | 7.56                | 201                      |
| 1981                          | 13,548.93               | 10,647                       | 11,262                        | 2,287                          | 10.20               | 224                      |
| 1985                          | 14,556.64               | 10,798                       | 11,422                        | 3,135                          | 11.63               | 270                      |
| 1992                          | 2,228.63                | 1,448                        | 1,532                         | 697                            | 14.24               | 49                       |
| 2010                          | 68,488.09               | 20,807                       | 22,008                        | 46,480                         | 19.29               | 2,410                    |
| 2015                          | 2,847.08                | 444                          | 470                           | 2,377                          | 18.47               | 129                      |
|                               | 136,698.14              | 75,766                       | 79,693                        | 57,005                         |                     | 3,421                    |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.7 2.50

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 387.4 OTHER EQUIPMENT - COMMUNICATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR<br>(1)                 | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 25-R2 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1973                        | 917.13                  | 908                          | 784                           | 133                            | 0.26                | 133                      |
| 1974                        | 11,561.27               | 11,321                       | 9,778                         | 1,783                          | 0.52                | 1,783                    |
| 1975                        | 3,189.09                | 3,090                        | 2,669                         | 520                            | 0.78                | 520                      |
| 1976                        | 6,308.81                | 6,155                        | 5,316                         | 993                            | 1.06                | 937                      |
| 1980                        | 1,144.78                | 1,086                        | 938                           | 207                            | 2.07                | 100                      |
| 1983                        | 10,695.21               | 9,887                        | 8,540                         | 2,155                          | 2.90                | 743                      |
| 1984                        | 4,730.23                | 4,331                        | 3,741                         | 989                            | 3.18                | 311                      |
| 1985                        | 27,353.09               | 24,771                       | 21,395                        | 5,958                          | 3.48                | 1,712                    |
| 1986                        | 61,596.14               | 55,110                       | 47,600                        | 13,996                         | 3.82                | 3,664                    |
| 1987                        | 40,005.58               | 35,445                       | 30,615                        | 9,391                          | 4.04                | 2,325                    |
| 1989                        | 3,425.59                | 2,953                        | 2,551                         | 875                            | 4.71                | 186                      |
| 1990                        | 37,952.71               | 32,248                       | 27,854                        | 10,099                         | 5.03                | 2,008                    |
| 1991                        | 31,594.95               | 26,420                       | 22,820                        | 8,775                          | 5.37                | 1,634                    |
| 1992                        | 6,510.50                | 5,349                        | 4,620                         | 1,890                          | 5.74                | 329                      |
| 1993                        | 1,718.09                | 1,384                        | 1,195                         | 523                            | 6.13                | 85                       |
| 1994                        | 4,082.11                | 3,220                        | 2,781                         | 1,301                          | 6.54                | 199                      |
| 2000                        | 47,842.64               | 31,806                       | 27,472                        | 20,371                         | 9.29                | 2,193                    |
| 2001                        | 142,467.12              | 91,065                       | 78,656                        | 63,811                         | 9.83                | 6,491                    |
| 2003                        | 2,326.24                | 1,363                        | 1,177                         | 1,149                          | 10.90               | 105                      |
| 2004                        | 119,576.43              | 66,712                       | 57,621                        | 61,955                         | 11.42               | 5,425                    |
| 2005                        | 235,835.64              | 124,663                      | 107,675                       | 128,161                        | 11.96               | 10,716                   |
| 2006                        | 17,269.88               | 8,599                        | 7,427                         | 9,843                          | 12.52               | 786                      |
| 2007                        | 9,937.59                | 4,629                        | 3,998                         | 5,940                          | 13.09               | 454                      |
| 2008                        | 0.11                    |                              |                               |                                |                     |                          |
| 2009                        | 5,832.45                | 2,329                        | 2,012                         | 3,820                          | 14.17               | 270                      |
| 2010                        | 123,486.39              | 44,900                       | 38,782                        | 84,704                         | 14.73               | 5,750                    |
| 2011                        | 49,875.40               | 16,274                       | 14,056                        | 35,819                         | 15.31               | 2,340                    |
| 2012                        | 163,197.40              | 47,017                       | 40,610                        | 122,587                        | 15.86               | 7,729                    |
| 2013                        | 708,244.07              | 176,494                      | 152,444                       | 555,800                        | 16.32               | 34,056                   |
| 2014                        | 2,010,015.43            | 418,083                      | 361,112                       | 1,648,903                      | 16.82               | 98,032                   |
| 2015                        | 778,635.92              | 128,786                      | 111,237                       | 667,399                        | 17.24               | 38,712                   |
| 2016                        | 1,916,275.07            | 232,061                      | 200,438                       | 1,715,837                      | 17.54               | 97,824                   |
| 2017                        | 1,644,420.52            | 125,634                      | 108,514                       | 1,535,907                      | 17.63               | 87,119                   |
|                             | 8,228,023.58            | 1,744,093                    | 1,506,428                     | 6,721,596                      |                     | 414,671                  |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.2 5.04

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, 2018

| YEAR<br>(1)                                                      | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 10-S3                                      |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                          |                         |                              |                               |                                |                     |                          |
| 2014                                                             | 2,053,366.00            | 959,538                      | 773,743                       | 1,279,623                      | 5.03                | 254,398                  |
|                                                                  | 2,053,366.00            | 959,538                      | 773,743                       | 1,279,623                      |                     | 254,398                  |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.0 |                         |                              |                               |                                |                     | 12.39                    |



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 390.1 STRUCTURES AND IMPROVEMENTS - COMMUNICATION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR<br>(1)                                                       | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 45-R2                                       |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                           |                         |                              |                               |                                |                     |                          |
| 1955                                                              | 1,170.54                | 1,024                        | 1,164                         | 7                              | 5.63                | 1                        |
| 1958                                                              | 192.08                  | 164                          | 186                           | 6                              | 6.54                | 1                        |
| 1959                                                              | 2,129.94                | 1,806                        | 2,053                         | 77                             | 6.85                | 11                       |
| 1971                                                              | 17,971.09               | 13,442                       | 15,283                        | 2,688                          | 11.34               | 237                      |
| 1983                                                              | 7,872.27                | 5,465                        | 6,214                         | 1,658                          | 15.60               | 106                      |
| 1984                                                              | 3,449.87                | 2,351                        | 2,673                         | 777                            | 16.09               | 48                       |
| 1987                                                              | 6,786.87                | 4,350                        | 4,946                         | 1,841                          | 17.60               | 105                      |
| 1988                                                              | 9,428.54                | 5,908                        | 6,717                         | 2,712                          | 18.13               | 150                      |
| 1989                                                              | 9,423.51                | 5,766                        | 6,556                         | 2,868                          | 18.66               | 154                      |
| 1990                                                              | 45,343.53               | 27,061                       | 30,767                        | 14,577                         | 19.20               | 759                      |
| 1991                                                              | 16,302.22               | 9,475                        | 10,773                        | 5,529                          | 19.75               | 280                      |
|                                                                   | 120,070.46              | 76,812                       | 87,332                        | 32,738                         |                     | 1,852                    |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 17.7 |                         |                              |                               |                                |                     | 1.54                     |

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, 2018

| YEAR<br>(1)                                                            | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|------------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. 20-SQUARE                                             |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                                |                         |                              |                               |                                |                     |                          |
| 1998                                                                   | 476,021.29              | 476,021                      | 476,021                       |                                |                     |                          |
| 1999                                                                   | 80,599.29               | 78,248                       | 80,599                        |                                |                     |                          |
| 2000                                                                   | 95,723.34               | 88,145                       | 95,723                        |                                |                     |                          |
| 2001                                                                   | 173,686.96              | 151,252                      | 171,405                       | 2,282                          | 2.58                | 884                      |
| 2002                                                                   | 94,356.55               | 77,451                       | 87,770                        | 6,587                          | 3.58                | 1,840                    |
| 2003                                                                   | 96,741.60               | 74,571                       | 84,507                        | 12,235                         | 4.58                | 2,671                    |
| 2004                                                                   | 31,580.89               | 22,764                       | 25,797                        | 5,784                          | 5.58                | 1,037                    |
| 2005                                                                   | 522.52                  | 351                          | 398                           | 125                            | 6.58                | 19                       |
| 2007                                                                   | 4,181.56                | 2,387                        | 2,705                         | 1,477                          | 8.58                | 172                      |
| 2010                                                                   | 7,734.00                | 3,255                        | 3,689                         | 4,045                          | 11.58               | 349                      |
| 2011                                                                   | 12,031.56               | 4,462                        | 5,057                         | 6,975                          | 12.58               | 554                      |
| 2012                                                                   | 1,550.11                | 497                          | 563                           | 987                            | 13.58               | 73                       |
| 2014                                                                   | 565,919.21              | 124,972                      | 141,623                       | 424,296                        | 15.58               | 27,233                   |
| 2015                                                                   | 1,175,148.72            | 200,751                      | 227,498                       | 947,651                        | 16.58               | 57,156                   |
| 2016                                                                   | 113,113.73              | 13,668                       | 15,489                        | 97,625                         | 17.58               | 5,553                    |
| 2017                                                                   | 14,623.69               | 1,066                        | 1,208                         | 13,416                         | 18.54               | 724                      |
|                                                                        | 2,943,535.02            | 1,319,861                    | 1,420,052                     | 1,523,483                      |                     | 98,265                   |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 15.5 3.34 |                         |                              |                               |                                |                     |                          |

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, 2018

| YEAR<br>(1)                                                       | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. 15-SQUARE                                        |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                           |                         |                              |                               |                                |                     |                          |
| 2011                                                              | 24,427.00               | 12,078                       | 12,843                        | 11,584                         | 7.58                | 1,528                    |
| 2015                                                              | 66,876.67               | 15,233                       | 16,197                        | 50,680                         | 11.58               | 4,377                    |
|                                                                   | 91,303.67               | 27,311                       | 29,040                        | 62,264                         |                     | 5,905                    |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 10.5 |                         |                              |                               |                                |                     | 6.47                     |

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, 2018

| YEAR<br>(1)                                                      | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. 5-SQUARE                                        |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                          |                         |                              |                               |                                |                     |                          |
| 2013                                                             | 299,109.66              | 299,110                      | 299,110                       |                                |                     |                          |
| 2014                                                             | 380,331.60              | 335,958                      | 292,872                       | 87,460                         | 0.58                | 87,460                   |
| 2015                                                             | 941,918.01              | 643,641                      | 561,096                       | 380,822                        | 1.58                | 241,027                  |
| 2016                                                             | 1,495,726.59            | 722,930                      | 630,216                       | 865,511                        | 2.58                | 335,469                  |
| 2017                                                             | 1,254,075.20            | 365,776                      | 318,866                       | 935,209                        | 3.54                | 264,183                  |
|                                                                  | 4,371,161.06            | 2,367,415                    | 2,102,160                     | 2,269,001                      |                     | 928,139                  |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 2.4 |                         |                              |                               |                                |                     | 21.23                    |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 392 TRANSPORTATION EQUIPMENT - TRAILERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR<br>(1)                                                            | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|------------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. 15-SQUARE                                             |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                                |                         |                              |                               |                                |                     |                          |
| 2004                                                                   | 33,837.96               | 32,522                       | 29,177                        | 4,661                          | 0.58                | 4,661                    |
| 2011                                                                   | 3,781.00                | 1,869                        | 1,677                         | 2,104                          | 7.58                | 278                      |
| 2012                                                                   | 14,849.79               | 6,352                        | 5,698                         | 9,152                          | 8.58                | 1,067                    |
| 2013                                                                   | 2,789.00                | 1,007                        | 903                           | 1,886                          | 9.58                | 197                      |
| 2015                                                                   | 4,197.10                | 956                          | 858                           | 3,339                          | 11.58               | 288                      |
|                                                                        | 59,454.85               | 42,706                       | 38,313                        | 21,142                         |                     | 6,491                    |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 3.3 10.92 |                         |                              |                               |                                |                     |                          |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 393 STORES EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR<br>(1)                                                  | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|--------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. 20-SQUARE                                   |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                      |                         |                              |                               |                                |                     |                          |
| 1998                                                         | 13,435.25               | 13,435                       | 13,435                        |                                |                     |                          |
|                                                              | 13,435.25               | 13,435                       | 13,435                        |                                |                     |                          |
| 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, 2018

| YEAR<br>(1)                                                       | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. 25-SQUARE                                        |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                           |                         |                              |                               |                                |                     |                          |
| 1993                                                              | 413,416.69              | 413,417                      | 413,417                       |                                |                     |                          |
| 1994                                                              | 566,669.51              | 553,449                      | 565,341                       | 1,329                          | 0.58                | 1,329                    |
| 1995                                                              | 162,417.47              | 152,132                      | 155,401                       | 7,016                          | 1.58                | 4,441                    |
| 1996                                                              | 552,198.39              | 495,140                      | 505,779                       | 46,419                         | 2.58                | 17,992                   |
| 1997                                                              | 1,161,874.46            | 995,343                      | 1,016,730                     | 145,144                        | 3.58                | 40,543                   |
| 1998                                                              | 383,704.26              | 313,360                      | 320,093                       | 63,611                         | 4.58                | 13,889                   |
| 1999                                                              | 191,341.50              | 148,609                      | 151,802                       | 39,540                         | 5.58                | 7,086                    |
| 2000                                                              | 296,716.81              | 218,582                      | 223,279                       | 73,438                         | 6.58                | 11,161                   |
| 2001                                                              | 186,888.81              | 130,200                      | 132,998                       | 53,891                         | 7.58                | 7,110                    |
| 2002                                                              | 303,527.92              | 199,318                      | 203,601                       | 99,927                         | 8.58                | 11,647                   |
| 2003                                                              | 291,419.99              | 179,710                      | 183,571                       | 107,849                        | 9.58                | 11,258                   |
| 2004                                                              | 366,999.55              | 211,638                      | 216,185                       | 150,815                        | 10.58               | 14,255                   |
| 2005                                                              | 79,725.36               | 42,786                       | 43,705                        | 36,020                         | 11.58               | 3,111                    |
| 2006                                                              | 167,413.05              | 83,149                       | 84,936                        | 82,477                         | 12.58               | 6,556                    |
| 2007                                                              | 835,832.86              | 381,700                      | 389,901                       | 445,932                        | 13.58               | 32,837                   |
| 2008                                                              | 1,181,797.10            | 492,419                      | 502,999                       | 678,798                        | 14.58               | 46,557                   |
| 2009                                                              | 278,442.30              | 104,881                      | 107,135                       | 171,307                        | 15.58               | 10,995                   |
| 2010                                                              | 777,173.73              | 261,651                      | 267,273                       | 509,901                        | 16.58               | 30,754                   |
| 2011                                                              | 595,579.35              | 176,691                      | 180,487                       | 415,092                        | 17.58               | 23,612                   |
| 2012                                                              | 870,830.41              | 223,516                      | 228,319                       | 642,511                        | 18.58               | 34,581                   |
| 2013                                                              | 784,168.63              | 169,906                      | 173,557                       | 610,612                        | 19.58               | 31,185                   |
| 2014                                                              | 894,641.85              | 158,056                      | 161,452                       | 733,190                        | 20.58               | 35,626                   |
| 2015                                                              | 1,788,936.70            | 244,494                      | 249,747                       | 1,539,190                      | 21.58               | 71,325                   |
| 2016                                                              | 971,312.23              | 93,897                       | 95,914                        | 875,398                        | 22.58               | 38,769                   |
| 2017                                                              | 1,449,495.87            | 84,549                       | 86,366                        | 1,363,130                      | 23.54               | 57,907                   |
| 2018                                                              | 1,298,649.00            | 21,648                       | 22,113                        | 1,276,536                      | 24.58               | 51,934                   |
|                                                                   | 16,851,173.80           | 6,550,241                    | 6,682,101                     | 10,169,073                     |                     | 616,460                  |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.5 |                         |                              |                               |                                |                     | 3.66                     |

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, 2018

| YEAR<br>(1)                   | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(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            | 1,135,354                    | 1,135,468                     |                                |                     |                          |
| 1996                          | 280,092.23              | 276,899                      | 280,092                       |                                |                     |                          |
| 1998                          | 98,401.65               | 94,623                       | 98,402                        |                                |                     |                          |
| 1999                          | 18,450.18               | 17,482                       | 18,450                        |                                |                     |                          |
| 2001                          | 80,747.15               | 74,118                       | 80,535                        | 212                            | 1.56                | 136                      |
|                               | 1,953,497.84            | 1,938,815                    | 1,953,286                     | 212                            |                     | 136                      |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 1.6 0.01



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 395 LABORATORY EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR<br>(1)                                                       | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. 20-SQUARE                                        |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                           |                         |                              |                               |                                |                     |                          |
| 1998                                                              | 4,710.24                | 4,710                        | 4,710                         |                                |                     |                          |
| 2000                                                              | 2,990.39                | 2,754                        | 2,442                         | 548                            | 1.58                | 347                      |
| 2002                                                              | 1,118.18                | 918                          | 814                           | 304                            | 3.58                | 85                       |
| 2011                                                              | 19,084.33               | 7,077                        | 6,274                         | 12,810                         | 12.58               | 1,018                    |
| 2015                                                              | 245,836.91              | 41,996                       | 37,231                        | 208,606                        | 16.58               | 12,582                   |
|                                                                   | 273,740.05              | 57,455                       | 51,471                        | 222,269                        |                     | 14,032                   |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 15.8 |                         |                              |                               |                                |                     | 5.13                     |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 396 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR<br>(1)                                                           | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 13-L2                                           |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                               |                         |                              |                               |                                |                     |                          |
| 1990                                                                  | 14,666.07               | 13,962                       | 14,666                        |                                |                     |                          |
| 1991                                                                  | 70,212.28               | 66,414                       | 70,212                        |                                |                     |                          |
| 1992                                                                  | 7,619.70                | 7,126                        | 7,620                         |                                |                     |                          |
| 1993                                                                  | 2,619.06                | 2,430                        | 2,619                         |                                |                     |                          |
| 1994                                                                  | 45,419.28               | 41,699                       | 45,419                        |                                |                     |                          |
| 1995                                                                  | 9,638.80                | 8,758                        | 9,639                         |                                |                     |                          |
| 1997                                                                  | 945.49                  | 838                          | 945                           |                                |                     |                          |
| 1999                                                                  | 89,292.15               | 76,809                       | 89,292                        |                                |                     |                          |
| 2000                                                                  | 424,416.34              | 359,566                      | 424,416                       |                                |                     |                          |
| 2001                                                                  | 23,340.60               | 19,391                       | 23,341                        |                                |                     |                          |
| 2002                                                                  | 21,599.55               | 17,589                       | 21,600                        |                                |                     |                          |
| 2003                                                                  | 296,898.31              | 237,103                      | 292,814                       | 4,084                          | 3.89                | 1,050                    |
| 2011                                                                  | 25,036.41               | 14,501                       | 17,908                        | 7,128                          | 5.39                | 1,322                    |
| 2014                                                                  | 4,400.00                | 1,718                        | 2,122                         | 2,278                          | 6.90                | 330                      |
|                                                                       | 1,036,104.04            | 867,904                      | 1,022,613                     | 13,491                         |                     | 2,702                    |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.0 0.26 |                         |                              |                               |                                |                     |                          |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 397.5 COMMUNICATION EQUIPMENT - TELEMETERING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR<br>(1)                                                           | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 19-R2.5                                         |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                               |                         |                              |                               |                                |                     |                          |
| 1991                                                                  | 169,689.75              | 159,101                      | 129,877                       | 39,813                         | 1.82                | 21,875                   |
| 1992                                                                  | 131,386.46              | 122,176                      | 99,734                        | 31,652                         | 1.99                | 15,906                   |
| 1995                                                                  | 9,868.38                | 8,851                        | 7,225                         | 2,643                          | 2.69                | 983                      |
| 1996                                                                  | 109,612.02              | 96,809                       | 79,027                        | 30,585                         | 2.96                | 10,333                   |
| 1997                                                                  | 65,107.14               | 56,474                       | 46,101                        | 19,006                         | 3.27                | 5,812                    |
| 1998                                                                  | 5,698.78                | 4,840                        | 3,951                         | 1,748                          | 3.62                | 483                      |
| 1999                                                                  | 88,117.49               | 73,058                       | 59,638                        | 28,479                         | 4.00                | 7,120                    |
| 2000                                                                  | 242,252.66              | 195,861                      | 159,884                       | 82,369                         | 4.36                | 18,892                   |
| 2001                                                                  | 110,164.04              | 86,347                       | 70,486                        | 39,678                         | 4.80                | 8,266                    |
| 2002                                                                  | 100,815.29              | 76,136                       | 62,151                        | 38,664                         | 5.32                | 7,268                    |
| 2004                                                                  | 2,869.12                | 1,994                        | 1,628                         | 1,241                          | 6.33                | 196                      |
| 2012                                                                  | 1,372.13                | 497                          | 406                           | 966                            | 11.28               | 86                       |
| 2013                                                                  | 23,891.58               | 7,466                        | 6,095                         | 17,797                         | 11.92               | 1,493                    |
| 2015                                                                  | 51,324.06               | 10,537                       | 8,601                         | 42,723                         | 13.22               | 3,232                    |
| 2018                                                                  | 1,609,996.00            | 45,724                       | 37,325                        | 1,572,671                      | 14.27               | 110,208                  |
|                                                                       | 2,722,164.90            | 945,871                      | 772,129                       | 1,950,036                      |                     | 212,153                  |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.2 7.79 |                         |                              |                               |                                |                     |                          |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 398 MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2018

| YEAR<br>(1)                                                       | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. 15-SQUARE                                        |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                           |                         |                              |                               |                                |                     |                          |
| 2003                                                              | 4,830.16                | 4,830                        | 4,830                         |                                |                     |                          |
| 2004                                                              | 11,186.58               | 10,752                       | 10,468                        | 719                            | 0.58                | 719                      |
| 2005                                                              | 23,458.02               | 20,982                       | 20,427                        | 3,031                          | 1.58                | 1,918                    |
| 2006                                                              | 8,228.13                | 6,811                        | 6,631                         | 1,597                          | 2.58                | 619                      |
| 2007                                                              | 136.82                  | 104                          | 101                           | 36                             | 3.58                | 10                       |
| 2008                                                              | 2,264.03                | 1,572                        | 1,530                         | 734                            | 4.58                | 160                      |
| 2009                                                              | 11,311.50               | 7,101                        | 6,913                         | 4,398                          | 5.58                | 788                      |
| 2010                                                              | 25,988.40               | 14,582                       | 14,196                        | 11,792                         | 6.58                | 1,792                    |
| 2011                                                              | 41,741.60               | 20,639                       | 20,093                        | 21,649                         | 7.58                | 2,856                    |
| 2012                                                              | 129,294.07              | 55,309                       | 53,846                        | 75,448                         | 8.58                | 8,793                    |
| 2013                                                              | 14,421.00               | 5,208                        | 5,070                         | 9,351                          | 9.58                | 976                      |
| 2014                                                              | 94,460.48               | 27,813                       | 27,078                        | 67,382                         | 10.58               | 6,369                    |
| 2015                                                              | 389,797.34              | 88,788                       | 86,440                        | 303,357                        | 11.58               | 26,197                   |
| 2016                                                              | 462,727.10              | 74,550                       | 72,579                        | 390,148                        | 12.58               | 31,013                   |
| 2017                                                              | 8,370.44                | 814                          | 792                           | 7,578                          | 13.54               | 560                      |
|                                                                   | 1,228,215.67            | 339,855                      | 330,994                       | 897,222                        |                     | 82,770                   |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 10.8 |                         |                              |                               |                                |                     | 6.74                     |

---

## **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<br>RETIREMENTS | COST OF<br>REMOVAL | GROSS<br>SALVAGE | NET<br>SALVAGE |
|-----------------------|------------------------|--------------------|------------------|----------------|
| 2013 TRANSACTION YEAR |                        |                    |                  |                |
| 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                | 4,567.77               | 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              |                    |                  |                |
|                       | 14,752,679.64          | 2,838,110.41       | 157,757.33       | 2,680,353.08-  |
| 2014 TRANSACTION YEAR |                        |                    |                  |                |
| 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                | 7,885,751.50           | 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              |                    |                  |                |
| 397.10                | 605,672.59             |                    |                  |                |
| 397.50                | 28,765.62              |                    |                  |                |
|                       | 15,972,226.14          | 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

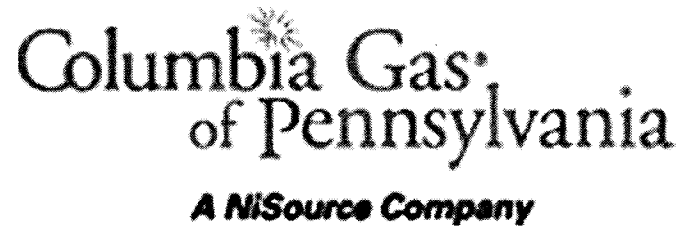
| ACCT                  | REGULAR<br>RETIREMENTS | COST OF<br>REMOVAL | GROSS<br>SALVAGE | NET<br>SALVAGE |
|-----------------------|------------------------|--------------------|------------------|----------------|
| 2015 TRANSACTION YEAR |                        |                    |                  |                |
| 362.10                |                        | 56,875.48          |                  | 56,875.48-     |
| 374.40                | 15,753.17              | 2,713.76           |                  | 2,713.76-      |
| 375.34                | 28,538.10              | 14,909.72          |                  | 14,909.72-     |
| 375.70                |                        | 22,140.00          |                  | 22,140.00-     |
| 376.00                | 8,996,141.74           | 978,776.00         | 20,828.00        | 957,948.00-    |
| 378.00                | 306,255.48             | 104,647.11         |                  | 104,647.11-    |
| 380.00                | 4,918,094.66           | 2,926,513.18       |                  | 2,926,513.18-  |
| 381.00                | 370,041.70             |                    |                  |                |
| 382.00                | 144,324.79             |                    |                  |                |
| 383.00                | 13,105.34              |                    |                  |                |
| 385.00                | 197,819.03             | 27,745.87          |                  | 27,745.87-     |
| 387.40                | 26,673.61              | 1,060.39           |                  | 1,060.39-      |
| 392.00                | 12,904.19              |                    | 26,139.89        | 26,139.89      |
| 394.00                | 758,805.48             |                    |                  |                |
| 396.00                |                        |                    | 109,393.82       | 109,393.82     |
| 397.10                | 173,475.92             |                    |                  |                |
| 397.50                | 29,824.98              | 29,402.56          |                  | 29,402.56-     |
|                       | 15,991,758.19          | 4,164,784.07       | 156,361.71       | 4,008,422.36-  |
| 2016 TRANSACTION YEAR |                        |                    |                  |                |
| 362.10                |                        | 27,770.30          |                  | 27,770.30-     |
| 374.20                | 7.02                   | 192.38             |                  | 192.38-        |
| 374.40                | 281.87                 | 17.13              |                  | 17.13-         |
| 375.34                | 72,407.95              | 26,961.80          |                  | 26,961.80-     |
| 375.70                | 9,328.45               |                    |                  |                |
| 376.00                | 8,479,913.68           | 1,131,099.09       | 3,855.00         | 1,127,244.09-  |
| 378.00                | 1,212,757.48           | 63,141.34          |                  | 63,141.34-     |
| 380.00                | 6,548,981.00           | 2,853,156.51       |                  | 2,853,156.51-  |
| 381.00                | 724,309.02             | 675.71             | 215,365.51       | 214,689.80     |
| 382.00                | 154,260.25             |                    |                  |                |
| 383.00                | 17,403.11              |                    |                  |                |
| 385.00                | 85,292.41              | 64,142.79          |                  | 64,142.79-     |
| 387.40                | 36,279.86              | 1,807.70           |                  | 1,807.70-      |
| 394.00                | 161,691.96             | 2,431.14           |                  | 2,431.14-      |
| 396.00                | 218,570.62             |                    | 52,454.60        | 52,454.60      |
| 397.10                | 168,830.82             |                    |                  |                |
| 397.50                | 14,631.27              |                    |                  |                |
|                       | 17,904,946.77          | 4,171,395.89       | 271,675.11       | 3,899,720.78-  |

COLUMBIA GAS OF PENNSYLVANIA, INC.

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

| ACCT                  | REGULAR<br>RETIREMENTS | COST OF<br>REMOVAL | GROSS<br>SALVAGE | NET<br>SALVAGE |
|-----------------------|------------------------|--------------------|------------------|----------------|
| 2017 TRANSACTION YEAR |                        |                    |                  |                |
| 362.10                |                        | 56,417.81          |                  | 56,417.81-     |
| 374.20                | 8.89                   |                    |                  |                |
| 374.40                | 11,936.44              | 38,240.05          |                  | 38,240.05-     |
| 375.34                | 177,551.37             | 36,137.31          |                  | 36,137.31-     |
| 376.00                | 12,225,336.78          | 1,258,205.78       | 1,297.00         | 1,256,908.78-  |
| 378.00                | 649,171.93             | 247,333.58         |                  | 247,333.58-    |
| 379.10                | 889.59                 |                    |                  |                |
| 380.00                | 7,406,277.97           | 2,142,798.48       |                  | 2,142,798.48-  |
| 381.00                | 394,736.32             | 4,899.87           | 34,508.89        | 29,609.02      |
| 382.00                | 124,360.72             |                    |                  |                |
| 383.00                | 12,648.88              |                    |                  |                |
| 385.00                | 357,612.63             | 113,814.22         |                  | 113,814.22-    |
| 387.40                | 37,733.38              | 459.97             |                  | 459.97-        |
| 392.00                | 42,274.76              |                    |                  |                |
| 394.00                | 186,713.88             | 1,648.52           |                  | 1,648.52-      |
| 396.00                | 180,818.08             |                    |                  |                |
| 397.50                | 43,079.36              | 257.12             |                  | 257.12-        |
|                       | 21,851,150.98          | 3,900,212.71       | 35,805.89        | 3,864,406.82-  |
| TOTAL                 | 86,472,761.72          | 21,567,620.95      | 621,600.04       | 20,946,020.91- |





## **2019 DEPRECIATION STUDY**

CALCULATED ANNUAL DEPRECIATION  
ACCRUALS RELATED TO GAS PLANT  
AS OF DECEMBER 31, 2019

*Prepared by:*



***Gannett Fleming***

*Excellence Delivered As Promised*

COLUMBIA GAS OF PENNSYLVANIA, INC.  
Pittsburgh, Pennsylvania

2019 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS  
RELATED TO GAS PLANT  
AS OF DECEMBER 31, 2019

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



**Gannett Fleming**

*Excellence Delivered As Promised*

Exhibit 109  
Attachment B  
Page 3 of 86  
Witness: J.J. Spanos

February 23, 2018

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, 2019. The results of our study as of November 30, 2018 are presented in our report titled "2018 Depreciation Study - Calculated Annual Depreciation Accruals Related to Gas Plant as of November 30, 2018". 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, 2019.

Respectfully submitted,

GANNETT FLEMING VALUATION  
AND RATE CONSULTANTS, LLC

JOHN J. SPANOS  
Sr. Vice President

JJS:mle

063476

Gannett Fleming Valuation and Rate Consultants, LLC

P.O. Box 67100 • Harrisburg, PA 17106-7100 | 207 Senate Avenue • Camp Hill, PA 17011  
t: 717.763.7211 • f: 717.763.4590

[www.gfvrc.com](http://www.gfvrc.com)



## TABLE OF CONTENTS

|                                                                                                                                                                          |       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| <b>PART I. RESULTS OF STUDY</b> .....                                                                                                                                    | I-1   |
| Description of Summary Tabulations.....                                                                                                                                  | I-2   |
| Description of Detailed Tabulations.....                                                                                                                                 | I-2   |
| Table 1 Summary of Estimated Survivor Curves, Original Cost, Book Reserve and Calculated Annual Depreciation Accruals Related to Gas Plant as of December 31, 2019 ..... | I-3   |
| Table 2 Bringforward to December 31, 2019, of the Book Reserve as of November 30, 2018 .....                                                                             | I-6   |
| Table 3 Calculation of Depreciation Accruals for the Thirteen Months Ended December 31, 2019 .....                                                                       | I-8   |
| Table 4 Amortization of Experienced and Estimated Net Salvage .....                                                                                                      | I-10  |
| <b>PART II. DETAILED DEPRECIATION CALCULATIONS</b> .....                                                                                                                 | II-1  |
| Cumulative Depreciated Original Cost .....                                                                                                                               | II-2  |
| Utility Plant in Service .....                                                                                                                                           | II-7  |
| <b>PART III. EXPERIENCED AND ESTIMATED NET SALVAGE</b> .....                                                                                                             | III-1 |

---

## 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, 2019. Table 1 sets forth, by depreciable group, the estimated survivor curve, original cost, book depreciation reserve as of December 31, 2019, 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, 2019. Table 3 sets forth the calculations of the depreciation accruals for the thirteen months ended December 31, 2019. Table 4 presents the annual amortization of experienced and estimated net salvage based on the period 2014 through 2018.

**DESCRIPTION OF DETAILED TABULATIONS**

The supporting data for the depreciation calculations are presented in account sequence in the section beginning on page II-7. The original cost, calculated accrued depreciation, allocated book reserve, future accruals, remaining life and annual accrual are shown for each vintage of each account or subaccount. The amounts of regular retirements, gross salvage and cost of removal are set forth by account for the years 2014 through 2018, beginning on pages III-2 through III-4.



## COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF DECEMBER 31, 2019

| DEPRECIABLE GROUP               |                                     | SURVIVOR CURVE | ORIGINAL COST<br>AS OF<br>DECEMBER 31, 2019 | BOOK<br>RESERVE | FUTURE<br>BOOK<br>ACCRUALS | CALCULATED<br>ANNUAL ACCRUAL |                     | COMPOSITE<br>REMAINING<br>LIFE |
|---------------------------------|-------------------------------------|----------------|---------------------------------------------|-----------------|----------------------------|------------------------------|---------------------|--------------------------------|
| (1)                             |                                     | (2)            | (3)                                         | (4)             | (5)                        | AMOUNT<br>(6)                | RATE<br>(7)=(6)/(3) | (8)=(5)/(6)                    |
| DEPRECIABLE PLANT               |                                     |                |                                             |                 |                            |                              |                     |                                |
| UNDERGROUND STORAGE PLANT       |                                     |                |                                             |                 |                            |                              |                     |                                |
| 350.2                           | RIGHTS OF WAY                       | SQUARE *       | 1,932.08                                    | 1,931           | 1                          | 0                            | -                   | -                              |
| 351                             | COMPRESSOR STATION STRUCTURES       | 65-R2.5 *      | 3,287,122.58                                | 1,854,407       | 1,432,716                  | 262,855                      | 8.00                | 5.5                            |
| WELLS                           |                                     |                |                                             |                 |                            |                              |                     |                                |
| 352.01                          | CONSTRUCTION                        | SQUARE *       | 799,133.73                                  | 799,118         | 16                         | 3                            | -                   | 5.3                            |
| 352.02                          | EQUIPMENT                           | 50-S2.5 *      | 168,679.67                                  | 168,680         | 0                          | 0                            | -                   | -                              |
| TOTAL ACCOUNT 352               |                                     |                | 967,813.40                                  | 967,798         | 16                         | 3                            |                     |                                |
| 352.1                           | STORAGE LEASEHOLDS AND RIGHTS       | SQUARE *       | 206,940.78                                  | 206,932         | 9                          | 2                            | -                   | 5.5                            |
| 353                             | LINES                               | 50-S1.5 *      | 399,542.52                                  | 399,543         | 0                          | 0                            | -                   | -                              |
| 354                             | COMPRESSOR STATION EQUIPMENT        | 55-R2.5 *      | 864,751.66                                  | 745,510         | 119,242                    | 21,926                       | 2.54                | 5.4                            |
| 355                             | MEASURING AND REGULATING EQUIPMENT  | 37-R1.5 *      | 104,476.92                                  | 104,477         | 0                          | 0                            | -                   | -                              |
| TOTAL UNDERGROUND STORAGE PLANT |                                     |                | 5,832,579.94                                | 4,280,598       | 1,551,984                  | 284,786                      | 4.88                |                                |
| DISTRIBUTION PLANT              |                                     |                |                                             |                 |                            |                              |                     |                                |
| LAND AND LAND RIGHTS            |                                     |                |                                             |                 |                            |                              |                     |                                |
| 374.4                           | LAND RIGHTS                         | 70-R2.5        | 3,128,086.38                                | 718,506         | 2,409,580                  | 52,833                       | 1.69                | 45.6                           |
| 374.5                           | RIGHTS OF WAY                       | 80-S4          | 3,239,641.11                                | 1,723,948       | 1,515,693                  | 35,299                       | 1.09                | 42.9                           |
| TOTAL ACCOUNT 374               |                                     |                | 6,367,727.49                                | 2,442,454       | 3,925,273                  | 88,132                       | 1.38                |                                |
| STRUCTURES AND IMPROVEMENTS     |                                     |                |                                             |                 |                            |                              |                     |                                |
| 375.34                          | MEASURING AND REGULATING            | 60-R1          | 5,625,780.39                                | 1,349,381       | 4,276,399                  | 125,008                      | 2.22                | 34.2                           |
| 375.6                           | INDUSTRIAL MEASURING AND REGULATING | 55-R1          | 87,669.84                                   | 75,984          | 11,686                     | 545                          | 0.62                | 21.4                           |
| 375.7                           | OTHER DISTRIBUTION SYSTEMS          |                |                                             |                 |                            |                              |                     |                                |
|                                 | DISTRIBUTION SYSTEM STRUCTURES      | 90-R1.5 *      | 6,190,378.55                                | 2,213,757       | 3,976,621                  | 201,022                      | 3.25                | 19.8                           |
|                                 | OTHER BUILDINGS                     | 35-R2          | 3,521,929.24                                | 930,739         | 2,591,190                  | 112,855                      | 3.20                | 23.0                           |
| TOTAL ACCOUNT 375.7             |                                     |                | 9,712,307.79                                | 3,144,496       | 6,567,811                  | 313,877                      | 3.23                | 20.9                           |
| 375.8                           | COMMUNICATION                       | 45-R3          | 16,515.17                                   | 7,601           | 8,914                      | 365                          | 2.21                | 24.4                           |
| TOTAL ACCOUNT 375               |                                     |                | 15,442,273.19                               | 4,577,462       | 10,864,810                 | 439,795                      | 2.85                |                                |
| 376                             | MAINS                               |                |                                             |                 |                            |                              |                     |                                |
|                                 | CAST IRON                           | 71-R1 *        | 274,963.20                                  | 237,129         | 37,834                     | 6,932                        | 2.52                | 5.5                            |
|                                 | BARE STEEL                          | 71-R1 *        | 50,187,511.96                               | 46,077,207      | 4,110,305                  | 404,607                      | 0.81                | 10.2                           |
|                                 | OTHER                               | 71-R1          | 1,754,983,020.86                            | 202,982,674     | 1,552,000,347              | 38,576,309                   | 2.20                | 40.2                           |
| TOTAL ACCOUNT 376               |                                     |                | 1,805,445,496.02                            | 249,297,010     | 1,556,148,486              | 38,987,848                   | 2.16                |                                |



## COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF DECEMBER 31, 2019

| DEPRECIABLE GROUP |                                                                   | SURVIVOR CURVE | ORIGINAL COST<br>AS OF<br>DECEMBER 31, 2019 | BOOK RESERVE | FUTURE BOOK<br>BOOK<br>ACCRUALS | CALCULATED<br>ANNUAL ACCRUAL |                     | COMPOSITE<br>REMAINING<br>LIFE |
|-------------------|-------------------------------------------------------------------|----------------|---------------------------------------------|--------------|---------------------------------|------------------------------|---------------------|--------------------------------|
| (1)               |                                                                   | (2)            | (3)                                         | (4)          | (5)                             | AMOUNT<br>(6)                | RATE<br>(7)=(6)/(3) | (8)=(5)/(6)                    |
| 378               | MEASURING AND REGULATING EQUIPMENT - GENERAL                      | 45-O1          | 91,291,941.76                               | 13,213,122   | 78,078,820                      | 3,615,210                    | 3.96                | 21.6                           |
| 379.1             | MEASURING AND REGULATING EQUIPMENT - CITY GATE                    | 35-S2          | 140,227.51                                  | 104,131      | 36,097                          | 3,534                        | 2.52                | 10.2                           |
| 380               | SERVICES                                                          |                |                                             |              |                                 |                              |                     |                                |
|                   | BARE STEEL                                                        | 50-R0.5        | 570,868.11                                  | 466,130      | 104,738                         | 12,384                       | 2.17                | 8.5                            |
|                   | OTHER                                                             | 50-R0.5        | 591,846,194.45                              | 135,201,627  | 456,644,567                     | 17,282,618                   | 2.92                | 26.4                           |
|                   | TOTAL ACCOUNT 380                                                 |                | 592,417,062.56                              | 135,667,757  | 456,749,305                     | 17,295,002                   | 2.92                |                                |
| 381               | METERS                                                            | 44-S1          | 39,768,797.60                               | 17,411,447   | 22,357,351                      | 937,707                      | 2.36                | 23.8                           |
| 381.1             | METERS - AMR                                                      | 15-S2.5        | 24,332,583.03                               | 13,831,919   | 10,500,664                      | 1,604,131                    | 6.59                | 6.5                            |
| 382               | METER INSTALLATIONS                                               | 55-R3          | 43,214,949.54                               | 13,549,487   | 29,665,463                      | 825,547                      | 1.91                | 35.9                           |
| 383               | HOUSE REGULATORS                                                  | 45-S2          | 13,305,975.36                               | 4,334,095    | 8,971,880                       | 298,012                      | 2.24                | 30.1                           |
| 384               | HOUSE REGULATOR INSTALLATIONS                                     | 45-S2          | 3,864,772.07                                | 3,112,325    | 752,447                         | 37,255                       | 0.96                | 20.2                           |
| 385               | INDUSTRIAL MEASURING AND REGULATING EQUIPMENT - OTHER THAN METERS | 30-R0.5        | 9,569,200.27                                | 3,162,340    | 6,406,860                       | 449,389                      | 4.70                | 14.3                           |
|                   | OTHER EQUIPMENT                                                   |                |                                             |              |                                 |                              |                     |                                |
| 387               | GENERAL                                                           | 32-R0.5        | 136,698.14                                  | 83,395       | 53,303                          | 3,159                        | 2.31                | 16.9                           |
| 387.4             | COMMUNICATION EQUIPMENT                                           | 25-R2          | 8,228,023.58                                | 1,956,608    | 6,271,416                       | 392,849                      | 4.77                | 16.0                           |
| 387.5             | GPS EQUIPMENT                                                     | 10-S3          | 2,053,366.00                                | 1,049,356    | 1,004,010                       | 241,930                      | 11.78               | 4.2                            |
|                   | TOTAL ACCOUNT 387                                                 |                | 10,418,087.72                               | 3,089,359    | 7,328,729                       | 637,938                      | 6.12                |                                |
|                   | TOTAL DISTRIBUTION PLANT                                          |                | 2,655,579,094.12                            | 463,792,908  | 2,191,786,185                   | 65,219,500                   | 2.46                |                                |
| GENERAL PLANT     |                                                                   |                |                                             |              |                                 |                              |                     |                                |
| 390.1             | STRUCTURES AND IMPROVEMENTS - COMMUNICATION                       | 45-R2          | 120,070.46                                  | 89,335       | 30,735                          | 1,795                        | 1.49                | 17.1                           |
|                   | OFFICE FURNITURE AND EQUIPMENT                                    |                |                                             |              |                                 |                              |                     |                                |
| 391.1             | FURNITURE                                                         | 20-SQ          | 2,386,914.44                                | 953,264      | 1,433,650                       | 100,681                      | 4.22                | 14.2                           |
| 391.11            | EQUIPMENT                                                         | 15-SQ          | 91,303.67                                   | 35,440       | 55,864                          | 5,904                        | 6.47                | 9.5                            |
| 391.12            | INFORMATION SYSTEMS                                               | 5-SQ           | 3,691,719.80                                | 2,358,538    | 1,333,182                       | 767,778                      | 20.80               | 1.7                            |
|                   | TOTAL ACCOUNT 391                                                 |                | 6,169,937.91                                | 3,347,242    | 2,822,696                       | 874,363                      | 14.17               |                                |
| 392               | TRANSPORTATION EQUIPMENT - TRAILERS                               | 15-SQ          | 25,616.89                                   | 4,950        | 20,667                          | 2,639                        | 10.30               | 7.8                            |
|                   | TOOLS, SHOP AND GARAGE EQUIPMENT                                  |                |                                             |              |                                 |                              |                     |                                |
| 394               | EQUIPMENT                                                         | 25-SQ          | 17,273,635.60                               | 6,380,375    | 10,893,261                      | 672,366                      | 3.89                | 16.2                           |
| 394.12            | CNG FACILITIES                                                    | 12-S1.5        | 1,953,497.84                                | 1,953,498    | 0                               | 0                            | -                   | -                              |
|                   | TOTAL ACCOUNT 394                                                 |                | 19,227,133.44                               | 8,333,873    | 10,893,261                      | 672,366                      | 3.50                |                                |

Exhibit 109  
Attachment B  
Page 8 of 86  
Witness: J.J. Spanos





## COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF DECEMBER 31, 2019

| DEPRECIABLE GROUP                 |                                        | SURVIVOR CURVE | ORIGINAL COST<br>AS OF<br>DECEMBER 31, 2019 | BOOK<br>RESERVE    | FUTURE<br>BOOK<br>ACCRUALS | CALCULATED<br>ANNUAL ACCRUAL |                     | COMPOSITE<br>REMAINING<br>LIFE |
|-----------------------------------|----------------------------------------|----------------|---------------------------------------------|--------------------|----------------------------|------------------------------|---------------------|--------------------------------|
| (1)                               |                                        | (2)            | (3)                                         | (4)                | (5)                        | AMOUNT<br>(6)                | RATE<br>(7)=(6)/(3) | (8)=(5)/(6)                    |
| 395                               | LABORATORY EQUIPMENT                   | 20-SQ          | 269,029.81                                  | 61,722             | 207,308                    | 14,006                       | 5.21                | 14.8                           |
| 396                               | POWER OPERATED EQUIPMENT               | 13-L2          | 1,036,104.04                                | 988,719            | 47,385                     | 12,753                       | 1.23                | 3.7                            |
| 397.5                             | COMMUNICATION EQUIPMENT - TELEMETERING | 19-R2.5        | 4,307,095.90                                | 889,259            | 3,417,837                  | 297,034                      | 6.90                | 11.5                           |
| 398                               | MISCELLANEOUS EQUIPMENT                | 15-SQ          | 1,212,198.93                                | 404,287            | 807,912                    | 81,314                       | 6.71                | 9.9                            |
| <b>TOTAL GENERAL PLANT</b>        |                                        |                | <b>32,367,187.38</b>                        | <b>14,119,387</b>  | <b>18,247,801</b>          | <b>1,956,270</b>             | <b>6.04</b>         |                                |
| <b>SUBTOTAL DEPRECIABLE PLANT</b> |                                        |                | <b>2,693,778,861.44</b>                     | <b>482,192,893</b> | <b>2,211,585,970</b>       | <b>67,460,556</b>            | <b>2.50</b>         |                                |
| <b>AMORTIZABLE PLANT</b>          |                                        |                |                                             |                    |                            |                              |                     |                                |
| 303                               | MISCELLANEOUS INTANGIBLE PLANT         |                | 42,270,983.78                               | 15,661,171         | 26,609,813                 | 4,872,321                    | **                  |                                |
| 362.1                             | ENVIRONMENTAL REMEDIATION              |                |                                             | (59,461)           |                            |                              |                     |                                |
| 374.2                             | LAND, OTHER DISTRIBUTION SYSTEMS       |                | 477,102.49                                  | 134,737            |                            |                              |                     |                                |
| 375.71                            | STRUCTURES AND IMPROVEMENTS - LEASED   |                | 5,092,375.78                                | 1,300,385          | 3,791,991                  | 224,318                      | **                  |                                |
| <b>SUBTOTAL AMORTIZABLE PLANT</b> |                                        |                | <b>47,840,462.05</b>                        | <b>17,036,832</b>  | <b>30,401,804</b>          | <b>5,096,639</b>             |                     |                                |
| <b>NONDEPRECIABLE PLANT</b>       |                                        |                | <b>172,413.08</b>                           |                    |                            |                              |                     |                                |
| <b>TOTAL GAS PLANT</b>            |                                        |                | <b>2,741,791,736.57</b>                     | <b>499,229,725</b> | <b>2,241,987,774</b>       | <b>72,557,195</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, 2019, OF THE BOOK RESERVE AS OF NOVEMBER 30, 2018

| ACCOUNT | BOOK RESERVE<br>AS OF<br>NOVEMBER 30, 2018 | DEPRECIATION<br>ACCRUALS | AMORTIZATION<br>OF<br>NET SALVAGE | PROJECTED<br>RETIREMENTS | PROJECTED<br>GROSS<br>SALVAGE | PROJECTED<br>COST OF<br>REMOVAL | ACQUISITIONS | ADJUSTMENTS | RESERVE AT<br>END OF<br>PERIOD | BOOK RESERVE AS<br>A PERCENT OF<br>ORIGINAL COST |
|---------|--------------------------------------------|--------------------------|-----------------------------------|--------------------------|-------------------------------|---------------------------------|--------------|-------------|--------------------------------|--------------------------------------------------|
| (1)     | (2)                                        | (3)                      | (4)                               | (5)                      | (6)                           | (7)                             | (8)          | (9)         | (10)                           | (11)                                             |
| 350.20  | 1,931                                      |                          |                                   |                          |                               |                                 |              |             | 1,931                          | 99.94                                            |
| 351.20  | 1,569,157                                  | 285,240                  | 10                                |                          |                               |                                 |              |             | 1,854,407                      | 56.41                                            |
| 352.01  | 799,118                                    |                          |                                   |                          |                               |                                 |              |             | 799,118                        | 100.00                                           |
| 352.02  | 168,680                                    |                          |                                   |                          |                               |                                 |              |             | 168,680                        | 100.00                                           |
| 352.10  | 206,932                                    |                          |                                   |                          |                               |                                 |              |             | 206,932                        | 100.00                                           |
| 353.00  | 399,543                                    |                          |                                   |                          |                               |                                 |              |             | 399,543                        | 100.00                                           |
| 354.00  | 721,621                                    | 23,889                   |                                   |                          |                               |                                 |              |             | 745,510                        | 86.21                                            |
| 355.00  | 104,477                                    |                          |                                   |                          |                               |                                 |              |             | 104,477                        | 100.00                                           |
| 374.40  | 687,983                                    | 54,443                   | 11,529                            | 23,294                   |                               | 12,155                          |              |             | 718,506                        | 22.97                                            |
| 374.50  | 1,682,111                                  | 38,606                   | 3,231                             |                          |                               |                                 |              |             | 1,723,948                      | 53.21                                            |
| 375.34  | 1,248,218                                  | 140,737                  | 25,740                            | 44,344                   |                               | 20,970                          |              |             | 1,349,381                      | 23.99                                            |
| 375.60  | 75,358                                     | 608                      | 18                                |                          |                               |                                 |              |             | 75,984                         | 86.67                                            |
| 375.70  | 2,878,649                                  | 305,394                  | 4,797                             | 44,344                   |                               |                                 |              |             | 3,144,496                      | 32.38                                            |
| 375.80  | 7,198                                      | 403                      |                                   |                          |                               |                                 |              |             | 7,601                          | 46.02                                            |
| 376.00  | 232,132,346                                | 38,948,364               | 1,418,811                         | 20,716,528               |                               | 2,485,983                       |              |             | 249,297,010                    | 13.81                                            |
| 378.00  | 9,954,585                                  | 4,137,357                | 283,583                           | 915,330                  |                               | 247,073                         |              |             | 13,213,122                     | 14.47                                            |
| 379.10  | 100,009                                    | 4,102                    | 20                                |                          |                               |                                 |              |             | 104,131                        | 74.26                                            |
| 380.00  | 123,820,471                                | 17,527,499               | 3,276,173                         | 5,982,996                |                               | 2,973,390                       |              |             | 135,667,757                    | 22.90                                            |
| 381.00  | 16,573,233                                 | 1,008,880                | (55,758)                          | 131,767                  | 16,859                        |                                 |              |             | 17,411,447                     | 43.78                                            |
| 381.10  | 12,001,395                                 | 1,830,524                |                                   |                          |                               |                                 |              |             | 13,831,919                     | 56.85                                            |
| 382.00  | 12,964,052                                 | 856,638                  |                                   | 271,203                  |                               |                                 |              |             | 13,549,487                     | 31.35                                            |
| 383.00  | 4,091,972                                  | 310,481                  |                                   | 68,358                   |                               |                                 |              |             | 4,334,095                      | 32.57                                            |
| 384.00  | 3,071,294                                  | 41,031                   |                                   |                          |                               |                                 |              |             | 3,112,325                      | 80.53                                            |
| 385.00  | 2,818,868                                  | 453,236                  | 66,295                            | 135,617                  |                               | 40,442                          |              |             | 3,162,340                      | 33.05                                            |
| 387.00  | 79,693                                     | 3,702                    |                                   |                          |                               |                                 |              |             | 83,395                         | 61.01                                            |
| 387.40  | 1,506,428                                  | 449,250                  | 930                               |                          |                               |                                 |              |             | 1,956,608                      | 23.78                                            |
| 387.50  | 773,743                                    | 275,613                  |                                   |                          |                               |                                 |              |             | 1,049,356                      | 51.10                                            |
| 390.10  | 87,332                                     | 2,003                    |                                   |                          |                               |                                 |              |             | 89,335                         | 74.40                                            |
| 391.10  | 1,420,052                                  | 89,833                   |                                   | 556,621                  |                               |                                 |              |             | 953,264                        | 39.94                                            |
| 391.11  | 29,040                                     | 6,400                    |                                   |                          |                               |                                 |              |             | 35,440                         | 38.82                                            |
| 391.12  | 2,102,160                                  | 935,819                  |                                   | 679,441                  |                               |                                 |              |             | 2,358,538                      | 63.89                                            |
| 392.00  | 38,313                                     | 6,880                    | (6,405)                           | 33,838                   |                               |                                 |              |             | 4,950                          | 19.32                                            |
| 393.00  | 13,435                                     |                          |                                   | 13,435                   |                               |                                 |              |             | 0                              | 0.00                                             |
| 394.00  | 6,682,101                                  | 677,476                  | 884                               | 980,086                  |                               |                                 |              |             | 6,380,375                      | 36.94                                            |
| 394.12  | 1,953,286                                  | 212                      |                                   |                          |                               |                                 |              |             | 1,953,498                      | 100.00                                           |
| 395.00  | 51,471                                     | 14,961                   |                                   | 4,710                    |                               |                                 |              |             | 61,722                         | 22.94                                            |
| 396.00  | 1,022,513                                  | 2,918                    | (36,812)                          |                          |                               |                                 |              |             | 988,719                        | 95.43                                            |
| 397.50  | 772,129                                    | 291,680                  | 14,266                            | 153,873                  |                               | 34,943                          |              |             | 889,259                        | 20.65                                            |
| 398.00  | 330,994                                    | 89,310                   |                                   | 16,017                   |                               |                                 |              |             | 404,287                        | 33.35                                            |
|         | 444,941,991                                | 68,813,489               | 5,007,312                         | 30,771,802               | 16,859                        | 5,814,956                       | 0            | 0           | 482,192,893                    |                                                  |



## COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 2. BRINGFORWARD TO DECEMBER 31, 2019, OF THE BOOK RESERVE AS OF NOVEMBER 30, 2018

| ACCOUNT<br>(1)    | BOOK RESERVE<br>AS OF<br>NOVEMBER 30, 2018<br>(2) | DEPRECIATION<br>ACCRUALS<br>(3) | AMORTIZATION<br>OF<br>NET SALVAGE<br>(4) | PROJECTED<br>RETIREMENTS<br>(5) | PROJECTED<br>GROSS<br>SALVAGE<br>(6) | PROJECTED<br>COST OF<br>REMOVAL<br>(7) | ACQUISITIONS<br>(8) | ADJUSTMENTS<br>(9) | RESERVE AT<br>END OF<br>PERIOD<br>(10) | BOOK RESERVE AS<br>A PERCENT OF<br>ORIGINAL COST<br>(11) |
|-------------------|---------------------------------------------------|---------------------------------|------------------------------------------|---------------------------------|--------------------------------------|----------------------------------------|---------------------|--------------------|----------------------------------------|----------------------------------------------------------|
|                   |                                                   | +                               | +                                        | -                               | +                                    | -                                      | +                   | -                  | =                                      |                                                          |
| AMORTIZABLE PLANT |                                                   |                                 |                                          |                                 |                                      |                                        |                     |                    |                                        |                                                          |
| 303.00            | 12,805,243                                        | 3,629,484                       |                                          | 773,556                         |                                      |                                        |                     |                    | 15,661,171                             | 37.05                                                    |
| 362.10            | (190,733)                                         |                                 | 131,272                                  |                                 |                                      |                                        |                     |                    | (59,461)                               |                                                          |
| 374.20            | 179,509                                           |                                 | (44,772)                                 |                                 |                                      |                                        |                     |                    | 134,737                                | 28.24                                                    |
| 375.71            | 1,149,715                                         | 235,875                         |                                          | 85,205                          |                                      |                                        |                     |                    | 1,300,385                              | 25.54                                                    |
|                   | 13,943,734                                        | 3,865,359                       | 86,500                                   | 858,761                         | 0                                    | 0                                      | 0                   | 0                  | 17,036,832                             |                                                          |
| TOTAL             | 458,885,725                                       | 72,678,848                      | 5,093,812                                | 31,630,563                      | 16,859                               | 5,814,956                              | 0                   | 0                  | 499,229,725                            |                                                          |

COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 3. CALCULATION OF DEPRECIATION ACCRUALS FOR THE THIRTEEN MONTHS ENDED DECEMBER 31, 2019

| DEPRECIABLE GROUP<br>(1)           |                                                                   | ORIGINAL COST<br>AS OF<br>NOVEMBER 30, 2018<br>(2) | ORIGINAL COST<br>AS OF<br>DECEMBER 31, 2019<br>(3) | COMPOSITE<br>ACCRUAL<br>RATE<br>(4) | ANNUAL<br>ACCRUAL<br>AMOUNT<br>(5)* |
|------------------------------------|-------------------------------------------------------------------|----------------------------------------------------|----------------------------------------------------|-------------------------------------|-------------------------------------|
| <b>DEPRECIABLE PLANT</b>           |                                                                   |                                                    |                                                    |                                     |                                     |
| <b>UNDERGROUND STORAGE PLANT</b>   |                                                                   |                                                    |                                                    |                                     |                                     |
| 350.2                              | RIGHTS-OF-WAY                                                     | 1,932                                              | 1,932                                              | -                                   | 0                                   |
| 351                                | COMPRESSOR STATION STRUCTURES                                     | 3,287,123                                          | 3,287,123                                          | 8.01                                | 285,240                             |
| <b>WELLS</b>                       |                                                                   |                                                    |                                                    |                                     |                                     |
| 352.01                             | CONSTRUCTION                                                      | 799,134                                            | 799,134                                            | -                                   | 0                                   |
| 352.02                             | EQUIPMENT                                                         | 168,680                                            | 168,680                                            | -                                   | 0                                   |
|                                    | <b>TOTAL ACCOUNT 352</b>                                          | <b>967,813</b>                                     | <b>967,813</b>                                     |                                     | <b>0</b>                            |
| 352.1                              | STORAGE LEASEHOLDS AND RIGHTS                                     | 206,941                                            | 206,941                                            | -                                   | 0                                   |
| 353                                | LINES                                                             | 399,543                                            | 399,543                                            | -                                   | 0                                   |
| 354                                | COMPRESSOR STATION EQUIPMENT                                      | 864,752                                            | 864,752                                            | 2.55                                | 23,889                              |
| 355                                | MEASURING AND REGULATING EQUIPMENT                                | 104,477                                            | 104,477                                            | -                                   | 0                                   |
|                                    | <b>TOTAL UNDERGROUND STORAGE PLANT</b>                            | <b>5,832,580</b>                                   | <b>5,832,580</b>                                   | <b>4.89</b>                         | <b>309,129</b>                      |
| <b>DISTRIBUTION PLANT</b>          |                                                                   |                                                    |                                                    |                                     |                                     |
| <b>LAND AND LAND RIGHTS</b>        |                                                                   |                                                    |                                                    |                                     |                                     |
| 374.4                              | LAND RIGHTS                                                       | 2,882,928                                          | 3,128,086                                          | 1.68                                | 54,443                              |
| 374.5                              | RIGHTS-OF-WAY                                                     | 3,239,641                                          | 3,239,641                                          | 1.10                                | 38,606                              |
|                                    | <b>TOTAL ACCOUNT 374</b>                                          | <b>6,122,569</b>                                   | <b>6,367,727</b>                                   | <b>1.37</b>                         | <b>93,049</b>                       |
| <b>STRUCTURES AND IMPROVEMENTS</b> |                                                                   |                                                    |                                                    |                                     |                                     |
| 375.34                             | MEASURING AND REGULATING                                          | 5,670,124                                          | 5,625,780                                          | 2.30                                | 140,737                             |
| 375.6                              | INDUSTRIAL MEASURING AND REGULATING                               | 87,670                                             | 87,670                                             | 0.64                                | 608                                 |
| 375.7                              | OTHER DISTRIBUTION SYSTEMS                                        |                                                    |                                                    |                                     |                                     |
|                                    | DISTRIBUTION SYSTEM STRUCTURES                                    | 5,717,577                                          | 6,190,379                                          | 3.04                                |                                     |
|                                    | OTHER BUILDINGS                                                   | 2,904,006                                          | 3,521,929                                          | 3.14                                |                                     |
|                                    | <b>TOTAL ACCOUNT 375.70</b>                                       | <b>8,621,583</b>                                   | <b>9,712,308</b>                                   | <b>3.08</b>                         | <b>305,394</b>                      |
| 375.8                              | COMMUNICATION STRUCTURES                                          | 16,515                                             | 16,515                                             | 2.25                                | 403                                 |
|                                    | <b>TOTAL ACCOUNT 375</b>                                          | <b>8,638,098</b>                                   | <b>9,728,823</b>                                   | <b>2.76</b>                         | <b>305,797</b>                      |
| 376                                | <b>MAINS</b>                                                      |                                                    |                                                    |                                     |                                     |
|                                    | CAST IRON                                                         | 343,949                                            | 274,963                                            | 1.86                                |                                     |
|                                    | BARE STEEL                                                        | 59,509,950                                         | 50,187,512                                         | 0.60                                |                                     |
|                                    | OTHER                                                             | 1,528,432,142                                      | 1,754,983,021                                      | 2.19                                |                                     |
|                                    | <b>TOTAL ACCOUNT 376</b>                                          | <b>1,588,286,041</b>                               | <b>1,805,445,496</b>                               | <b>2.14</b>                         | <b>38,948,364</b>                   |
| 378                                | MEASURING AND REGULATING EQUIPMENT - GENERAL                      | 80,847,167                                         | 91,291,942                                         | 4.38                                | 4,137,357                           |
| 379.1                              | MEASURING AND REGULATING EQUIPMENT - CITY GATE                    | 140,228                                            | 140,228                                            | 2.70                                | 4,102                               |
| 380                                | <b>SERVICES</b>                                                   |                                                    |                                                    |                                     |                                     |
|                                    | BARE STEEL                                                        | 750,358                                            | 570,868                                            | 2.16                                |                                     |
|                                    | OTHER                                                             | 530,624,172                                        | 591,846,194                                        | 2.90                                |                                     |
|                                    | <b>TOTAL ACCOUNT 380</b>                                          | <b>531,374,531</b>                                 | <b>592,417,063</b>                                 | <b>2.90</b>                         | <b>17,527,499</b>                   |
| 381                                | METERS                                                            | 38,642,927                                         | 39,768,798                                         | 2.38                                | 1,008,880                           |
| 381.1                              | METERS - AMR                                                      | 24,110,646                                         | 24,332,583                                         | 6.98                                | 1,830,524                           |
| 382                                | METER INSTALLATIONS                                               | 40,392,816                                         | 43,214,950                                         | 1.90                                | 856,638                             |
| 383                                | HOUSE REGULATORS                                                  | 12,601,762                                         | 13,305,975                                         | 2.22                                | 310,481                             |
| 384                                | HOUSE REGULATOR INSTALLATIONS                                     | 3,864,772                                          | 3,864,772                                          | 0.98                                | 41,031                              |
| 385                                | INDUSTRIAL MEASURING AND REGULATING EQUIPMENT - OTHER THAN METERS | 8,162,002                                          | 9,569,200                                          | 4.77                                | 453,236                             |
| <b>OTHER EQUIPMENT</b>             |                                                                   |                                                    |                                                    |                                     |                                     |
| 387                                | GENERAL                                                           | 136,698                                            | 136,698                                            | 2.50                                | 3,702                               |
| 387.4                              | CUSTOMER INFORMATION SERVICES                                     | 8,228,024                                          | 8,228,024                                          | 5.04                                | 449,250                             |
| 387.5                              | GPS EQUIPMENT                                                     | 2,053,366                                          | 2,053,366                                          | 12.39                               | 275,613                             |
|                                    | <b>TOTAL ACCOUNT 387</b>                                          | <b>10,418,088</b>                                  | <b>10,418,088</b>                                  | <b>6.46</b>                         | <b>728,565</b>                      |
|                                    | <b>TOTAL DISTRIBUTION PLANT</b>                                   | <b>2,359,359,440</b>                               | <b>2,655,579,094</b>                               | <b>2.46</b>                         | <b>66,386,868</b>                   |

COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 3. CALCULATION OF DEPRECIATION ACCRUALS FOR THE THIRTEEN MONTHS ENDED DECEMBER 31, 2019

| DEPRECIABLE GROUP<br>(1)    |                                              | ORIGINAL COST<br>AS OF<br>NOVEMBER 30, 2018<br>(2) | ORIGINAL COST<br>AS OF<br>DECEMBER 31, 2019<br>(3) | COMPOSITE<br>ACCRUAL<br>RATE<br>(4) | ANNUAL<br>ACCRUAL<br>AMOUNT<br>(5)* |
|-----------------------------|----------------------------------------------|----------------------------------------------------|----------------------------------------------------|-------------------------------------|-------------------------------------|
| <b>GENERAL PLANT</b>        |                                              |                                                    |                                                    |                                     |                                     |
| 390.1                       | STRUCTURES AND IMPROVEMENTS - COMMUNICATIONS | 120,070                                            | 120,070                                            | 1.54                                | 2,003                               |
|                             | OFFICE FURNITURE AND EQUIPMENT               |                                                    |                                                    |                                     |                                     |
| 391.1                       | FURNITURE                                    | 2,943,535                                          | 2,386,914                                          | 3.34                                | 89,833                              |
| 391.11                      | EQUIPMENT                                    | 91,304                                             | 91,304                                             | 6.47                                | 6,400                               |
| 391.12                      | INFORMATION SYSTEMS                          | 4,371,161                                          | 3,691,720                                          | 21.23                               | 935,819                             |
|                             | TOTAL ACCOUNT 391                            | 7,406,000                                          | 6,169,938                                          | 13.94                               | 1,032,052                           |
| 392                         | TRANSPORTATION EQUIPMENT - TRAILERS          | 59,455                                             | 25,617                                             | 10.92                               | 6,880                               |
| 393                         | STORES EQUIPMENT                             | 13,435                                             | 0                                                  | -                                   | 0                                   |
|                             | TOOLS, SHOP AND GARAGE EQUIPMENT             |                                                    |                                                    |                                     |                                     |
| 394                         | EQUIPMENT                                    | 16,851,174                                         | 17,273,636                                         | 3.66                                | 677,476                             |
| 394.12                      | CNG FACILITIES                               | 1,953,498                                          | 1,953,498                                          | 0.01                                | 212                                 |
|                             | TOTAL ACCOUNT 394                            | 18,804,672                                         | 19,227,133                                         | 3.28                                | 677,688                             |
| 395                         | LABORATORY EQUIPMENT                         | 273,740                                            | 269,030                                            | 5.13                                | 14,961                              |
| 396                         | POWER OPERATED EQUIPMENT                     | 1,036,104                                          | 1,036,104                                          | 0.26                                | 2,918                               |
| 397.5                       | COMMUNICATION EQUIPMENT - TELEMETERING       | 2,722,165                                          | 4,307,096                                          | 7.79                                | 291,680                             |
| 398                         | MISCELLANEOUS EQUIPMENT                      | 1,228,216                                          | 1,212,199                                          | 6.74                                | 89,310                              |
|                             | TOTAL GENERAL PLANT                          | 31,663,857                                         | 32,367,187                                         | 6.22                                | 2,117,492                           |
|                             | SUBTOTAL DEPRECIABLE PLANT                   | 2,396,855,877                                      | 2,693,778,861                                      | 2.52                                | 68,813,489                          |
| <b>AMORTIZABLE PLANT</b>    |                                              |                                                    |                                                    |                                     |                                     |
| 303                         | MISCELLANEOUS INTANGIBLE PLANT               | 33,925,352                                         | 42,270,984                                         | **                                  | 3,629,484                           |
| 305                         | STRUCTURES AND IMPROVEMENTS                  |                                                    |                                                    |                                     |                                     |
| 362                         | GAS HOLDERS                                  |                                                    |                                                    |                                     |                                     |
| 362.1                       | ENVIRONMENTAL REMEDIATION                    |                                                    |                                                    |                                     |                                     |
| 374.2                       | LAND, OTHER DISTRIBUTION SYSTEMS             | 477,102                                            | 477,102                                            |                                     |                                     |
| 375.71                      | STRUCTURES AND IMPROVEMENTS - LEASED         | 4,087,035                                          | 5,092,376                                          | **                                  | 235,875                             |
| 389.2                       | LAND AND LAND RIGHTS - LAND RIGHTS           |                                                    |                                                    |                                     |                                     |
|                             | SUBTOTAL AMORTIZABLE PLANT                   | 38,489,489                                         | 47,840,462                                         |                                     | 3,865,359                           |
| <b>NONDEPRECIABLE PLANT</b> |                                              | 172,413                                            | 172,413                                            |                                     |                                     |
|                             | TOTAL GAS PLANT                              | 2,435,517,779                                      | 2,741,791,737                                      |                                     | 72,678,848                          |

\* 13-month total based on monthly averages

\*\* Prorated accruals based on individual asset amortization



## COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 4. AMORTIZATION OF EXPERIENCED AND ESTIMATED NET SALVAGE

| ACCOUNT<br>(1) | 2014                      |                         | 2015                      |                         | 2016                      |                         | 2017                      |                         | 2018                       |                          | NET<br>SALVAGE<br>(12) | SALVAGE<br>ACCRUAL<br>(13)=(12)/5 |
|----------------|---------------------------|-------------------------|---------------------------|-------------------------|---------------------------|-------------------------|---------------------------|-------------------------|----------------------------|--------------------------|------------------------|-----------------------------------|
|                | COST OF<br>REMOVAL<br>(2) | GROSS<br>SALVAGE<br>(3) | COST OF<br>REMOVAL<br>(4) | GROSS<br>SALVAGE<br>(5) | COST OF<br>REMOVAL<br>(6) | GROSS<br>SALVAGE<br>(7) | COST OF<br>REMOVAL<br>(8) | GROSS<br>SALVAGE<br>(9) | COST OF<br>REMOVAL<br>(10) | GROSS<br>SALVAGE<br>(11) |                        |                                   |
| 362.10         | 461,689.98                |                         | 56,875.48                 |                         | 27,770.30                 |                         | 56,417.81                 |                         |                            |                          | (602,753.57)           | (120,551)                         |
| 374.20         | (211,267.49)              |                         |                           |                         | 192.38                    |                         |                           |                         |                            |                          | 211,075.11             | 42,215                            |
| 374.40         | 21.91                     |                         | 2,713.76                  |                         | 17.13                     |                         | 38,240.05                 |                         | 12,825.00                  |                          | (53,817.85)            | (10,764)                          |
| 374.50         |                           |                         | 14,909.72                 |                         |                           |                         |                           |                         |                            |                          | (14,909.72)            | (2,982)                           |
| 375.34         | 20,674.45                 |                         |                           |                         | 26,961.80                 |                         | 36,137.31                 |                         | 36,077.00                  |                          | (119,850.56)           | (23,970)                          |
| 375.70         |                           |                         | 22,140.00                 |                         |                           |                         |                           |                         |                            |                          | (22,140.00)            | (4,428)                           |
| 376.00         | 1,281,289.43              |                         | 978,776.00                | 20,828.00               | 1,131,099.09              | 3,855.00                | 1,258,205.78              | 1,297.00                | 2,027,910.00               |                          | (6,651,300.30)         | (1,330,260)                       |
| 378.00         | 185,399.17                |                         | 104,647.11                |                         | 63,141.34                 |                         | 247,333.58                |                         | 749,282.00                 |                          | (1,349,803.20)         | (269,961)                         |
| 379.10         | 91.84                     |                         |                           |                         |                           |                         |                           |                         |                            |                          | (91.84)                | (18)                              |
| 380.00         | 4,690,972.30              |                         | 2,926,513.18              |                         | 2,853,156.51              |                         | 2,142,798.48              |                         | 2,570,406.00               |                          | (15,183,846.47)        | (3,036,769)                       |
| 381.00         |                           |                         |                           |                         | 675.71                    | 215,365.51              | 4,899.87                  | 34,508.89               |                            | 13,585.00                | 257,883.82             | 51,577                            |
| 385.00         | 63,312.71                 |                         | 27,745.87                 |                         | 64,142.79                 |                         | 113,814.22                |                         | 35,778.00                  |                          | (304,793.59)           | (60,959)                          |
| 387.40         | 933.57                    |                         | 1,060.39                  |                         | 1,807.70                  |                         | 459.97                    |                         |                            |                          | (4,261.63)             | (852)                             |
| 392.00         |                           |                         |                           | 26,139.89               |                           |                         |                           |                         |                            |                          | 26,139.89              | 5,228                             |
| 394.00         |                           |                         |                           |                         | 2,431.14                  |                         | 1,648.52                  |                         |                            |                          | (4,079.66)             | (816)                             |
| 396.00         |                           |                         |                           | 109,393.82              |                           | 52,454.60               |                           |                         |                            |                          | 161,848.42             | 32,370                            |
| 397.50         |                           |                         | 29,402.56                 |                         |                           |                         | 257.12                    |                         | 39,202.00                  |                          | (68,861.68)            | (13,772)                          |
| TOTAL          | <u>6,493,117.87</u>       | <u>0.00</u>             | <u>4,164,784.07</u>       | <u>156,361.71</u>       | <u>4,171,395.89</u>       | <u>271,675.11</u>       | <u>3,900,212.71</u>       | <u>35,805.89</u>        | <u>5,471,480.00</u>        | <u>13,585.00</u>         | <u>(23,723,562.83)</u> | <u>(4,744,712)</u>                |

---

## **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, 2019

| YEAR<br>INST<br>(1)     | ORIGINAL<br>COST<br>(2) | ACCRUED<br>DEPRECIATION<br>(3) | DEPRECIATED ORIGINAL COST  |                             | PCT OF<br>COL 4<br>TOTAL<br>(6) |
|-------------------------|-------------------------|--------------------------------|----------------------------|-----------------------------|---------------------------------|
|                         |                         |                                | AMOUNT<br>(2) - (3)<br>(4) | CUMULATIVE<br>AMOUNT<br>(5) |                                 |
| 2013                    | 165,995,542             | 21,342,538                     | 144,653,004                | 910,751,290                 | 41.2                            |
| 2014                    | 184,190,440             | 21,996,061                     | 162,194,379                | 1,072,945,669               | 48.5                            |
| 2015                    | 178,311,252             | 18,055,567                     | 160,255,685                | 1,233,201,354               | 55.8                            |
| 2016                    | 220,996,728             | 17,387,303                     | 203,609,425                | 1,436,810,779               | 65.0                            |
| 2017                    | 254,891,685             | 15,706,007                     | 239,185,678                | 1,675,996,457               | 75.8                            |
| 2018                    | 272,594,950             | 10,978,303                     | 261,616,647                | 1,937,613,104               | 87.6                            |
| 2019                    | 278,189,604             | 4,216,748                      | 273,972,856                | 2,211,585,960               | 100.0                           |
| SUBTOTAL                | 2,693,778,861           | 482,192,893                    | 2,211,585,970              |                             |                                 |
| AMORTIZABLE<br>PLANT    | 47,840,462              | 17,036,832                     | 30,803,630                 |                             |                                 |
| NONDEPRECIABLE<br>PLANT | 172,413                 | -                              | 172,413                    |                             |                                 |
| TOTAL                   | 2,741,791,736           | 499,229,725                    | 2,242,562,013              |                             |                                 |

COLUMBIA GAS OF PENNSYLVANIA, INC.

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>INST<br>(1) | ORIGINAL<br>COST<br>(2) | ACCRUED<br>DEPRECIATION<br>(3) | AMOUNT |              | CUMULATIVE<br>AMOUNT<br>(5) | DEPRECIATED ORIGINAL COST<br>PCT OF<br>COL 4<br>TOTAL<br>(6) |
|---------------------|-------------------------|--------------------------------|--------|--------------|-----------------------------|--------------------------------------------------------------|
|                     |                         |                                | (2)    | - (3)<br>(4) |                             |                                                              |
| 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                | 1,680                   | 1,680                          |        |              |                             | 0.0                                                          |
| 1891                | 8,350                   | 8,350                          |        |              |                             | 0.0                                                          |
| 1892                | 1,355                   | 1,355                          |        |              |                             | 0.0                                                          |
| 1893                | 651                     | 651                            |        |              |                             | 0.0                                                          |
| 1894                | 1,617                   | 1,617                          |        |              |                             | 0.0                                                          |
| 1895                | 1,133                   | 1,133                          |        |              |                             | 0.0                                                          |
| 1896                | 4,261                   | 4,261                          |        |              |                             | 0.0                                                          |
| 1897                | 2,268                   | 2,268                          |        |              |                             | 0.0                                                          |
| 1898                | 1,634                   | 1,634                          |        |              |                             | 0.0                                                          |
| 1899                | 934                     | 934                            |        |              |                             | 0.0                                                          |
| 1900                | 8,185                   | 8,185                          |        |              |                             | 0.0                                                          |
| 1901                | 15,228                  | 15,228                         |        |              |                             | 0.0                                                          |
| 1902                | 7,331                   | 7,331                          |        |              |                             | 0.0                                                          |
| 1903                | 15,446                  | 15,446                         |        |              |                             | 0.0                                                          |
| 1904                | 8,443                   | 8,443                          |        |              |                             | 0.0                                                          |
| 1905                | 13,211                  | 13,211                         |        |              |                             | 0.0                                                          |
| 1906                | 5,827                   | 5,827                          |        |              |                             | 0.0                                                          |
| 1907                | 4,319                   | 4,319                          |        |              |                             | 0.0                                                          |
| 1908                | 5,085                   | 5,085                          |        |              |                             | 0.0                                                          |
| 1909                | 5,578                   | 5,578                          |        |              |                             | 0.0                                                          |
| 1910                | 945                     | 945                            |        |              |                             | 0.0                                                          |
| 1911                | 1,806                   | 1,806                          |        |              |                             | 0.0                                                          |
| 1912                | 1,590                   | 1,590                          |        |              |                             | 0.0                                                          |
| 1913                | 4,202                   | 4,202                          |        |              |                             | 0.0                                                          |
| 1914                | 6,538                   | 6,538                          |        |              |                             | 0.0                                                          |
| 1915                | 9,320                   | 9,320                          |        |              |                             | 0.0                                                          |
| 1916                | 2,189                   | 2,189                          |        |              |                             | 0.0                                                          |
| 1917                | 3,115                   | 3,115                          |        |              |                             | 0.0                                                          |
| 1918                | 1,643                   | 1,642                          |        | 1            | 1                           | 0.0                                                          |
| 1919                | 1,170                   | 1,167                          |        | 3            | 4                           | 0.0                                                          |
| 1920                | 1,386                   | 1,378                          |        | 8            | 12                          | 0.0                                                          |
| 1921                | 7,524                   | 6,911                          |        | 613          | 625                         | 0.0                                                          |
| 1922                | 6,635                   | 6,550                          |        | 85           | 710                         | 0.0                                                          |
| 1923                | 8,322                   | 8,106                          |        | 216          | 926                         | 0.0                                                          |
| 1924                | 17,775                  | 15,920                         |        | 1,855        | 2,781                       | 0.0                                                          |
| 1925                | 18,824                  | 17,547                         |        | 1,277        | 4,058                       | 0.0                                                          |
| 1926                | 36,842                  | 32,746                         |        | 4,096        | 8,154                       | 0.0                                                          |

COLUMBIA GAS OF PENNSYLVANIA, INC.

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>INST<br>(1) | ORIGINAL<br>COST<br>(2) | ACCRUED<br>DEPRECIATION<br>(3) | AMOUNT    |     | CUMULATIVE<br>AMOUNT<br>(5) | PCT OF<br>COL 4<br>TOTAL<br>(6) |
|---------------------|-------------------------|--------------------------------|-----------|-----|-----------------------------|---------------------------------|
|                     |                         |                                | (2)       | (3) |                             |                                 |
|                     |                         |                                | (4)       |     |                             |                                 |
| 1927                | 20,070                  | 18,296                         | 1,774     |     | 9,928                       | 0.0                             |
| 1928                | 25,209                  | 22,936                         | 2,273     |     | 12,201                      | 0.0                             |
| 1929                | 43,591                  | 38,894                         | 4,697     |     | 16,898                      | 0.0                             |
| 1930                | 17,975                  | 15,468                         | 2,507     |     | 19,405                      | 0.0                             |
| 1931                | 13,606                  | 12,110                         | 1,496     |     | 20,901                      | 0.0                             |
| 1932                | 3,983                   | 3,361                          | 622       |     | 21,523                      | 0.0                             |
| 1933                | 8,871                   | 7,301                          | 1,570     |     | 23,093                      | 0.0                             |
| 1934                | 7,882                   | 7,117                          | 765       |     | 23,858                      | 0.0                             |
| 1935                | 1,122                   | 1,047                          | 75        |     | 23,933                      | 0.0                             |
| 1936                | 7,568                   | 6,639                          | 929       |     | 24,862                      | 0.0                             |
| 1937                | 6,810                   | 6,564                          | 246       |     | 25,108                      | 0.0                             |
| 1938                | 12,456                  | 11,805                         | 651       |     | 25,759                      | 0.0                             |
| 1939                | 131,216                 | 112,568                        | 18,648    |     | 44,407                      | 0.0                             |
| 1940                | 22,375                  | 20,644                         | 1,731     |     | 46,138                      | 0.0                             |
| 1941                | 21,375                  | 19,623                         | 1,752     |     | 47,890                      | 0.0                             |
| 1942                | 23,309                  | 21,485                         | 1,824     |     | 49,714                      | 0.0                             |
| 1943                | 15,132                  | 13,754                         | 1,378     |     | 51,092                      | 0.0                             |
| 1944                | 15,613                  | 14,258                         | 1,355     |     | 52,447                      | 0.0                             |
| 1945                | 12,244                  | 10,816                         | 1,428     |     | 53,875                      | 0.0                             |
| 1946                | 27,324                  | 24,233                         | 3,091     |     | 56,966                      | 0.0                             |
| 1947                | 43,235                  | 37,414                         | 5,821     |     | 62,787                      | 0.0                             |
| 1948                | 139,836                 | 125,710                        | 14,126    |     | 76,913                      | 0.0                             |
| 1949                | 351,994                 | 325,396                        | 26,598    |     | 103,511                     | 0.0                             |
| 1950                | 717,047                 | 666,231                        | 50,816    |     | 154,327                     | 0.0                             |
| 1951                | 702,000                 | 645,732                        | 56,268    |     | 210,595                     | 0.0                             |
| 1952                | 1,502,533               | 1,348,486                      | 154,047   |     | 364,642                     | 0.0                             |
| 1953                | 1,055,305               | 970,843                        | 84,462    |     | 449,104                     | 0.0                             |
| 1954                | 1,423,989               | 1,297,089                      | 126,900   |     | 576,004                     | 0.0                             |
| 1955                | 3,389,430               | 3,065,967                      | 323,463   |     | 899,467                     | 0.0                             |
| 1956                | 2,274,423               | 1,995,618                      | 278,805   |     | 1,178,272                   | 0.1                             |
| 1957                | 3,022,063               | 2,674,869                      | 347,194   |     | 1,525,466                   | 0.1                             |
| 1958                | 3,613,393               | 3,193,555                      | 419,838   |     | 1,945,304                   | 0.1                             |
| 1959                | 3,133,175               | 2,716,449                      | 416,726   |     | 2,362,030                   | 0.1                             |
| 1960                | 3,517,972               | 2,996,698                      | 521,274   |     | 2,883,304                   | 0.1                             |
| 1961                | 3,831,082               | 3,291,679                      | 539,403   |     | 3,422,707                   | 0.2                             |
| 1962                | 3,567,151               | 2,981,086                      | 586,065   |     | 4,008,772                   | 0.2                             |
| 1963                | 4,387,662               | 3,706,236                      | 681,426   |     | 4,690,198                   | 0.2                             |
| 1964                | 4,520,745               | 3,781,156                      | 739,589   |     | 5,429,787                   | 0.2                             |
| 1965                | 3,792,033               | 3,144,561                      | 647,472   |     | 6,077,259                   | 0.3                             |
| 1966                | 5,232,672               | 4,340,189                      | 892,483   |     | 6,969,742                   | 0.3                             |
| 1967                | 5,084,109               | 4,192,647                      | 891,462   |     | 7,861,204                   | 0.4                             |
| 1968                | 4,503,608               | 3,516,009                      | 987,599   |     | 8,848,803                   | 0.4                             |
| 1969                | 4,048,294               | 2,985,105                      | 1,063,189 |     | 9,911,992                   | 0.4                             |

COLUMBIA GAS OF PENNSYLVANIA, INC.

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>INST<br>(1) | ORIGINAL<br>COST<br>(2) | ACCRUED<br>DEPRECIATION<br>(3) | DEPRECIATED ORIGINAL COST  |                             | PCT OF<br>COL 4<br>TOTAL<br>(6) |
|---------------------|-------------------------|--------------------------------|----------------------------|-----------------------------|---------------------------------|
|                     |                         |                                | AMOUNT<br>(2) - (3)<br>(4) | CUMULATIVE<br>AMOUNT<br>(5) |                                 |
| 1970                | 4,124,659               | 3,154,502                      | 970,157                    | 10,882,149                  | 0.5                             |
| 1971                | 5,906,699               | 4,260,379                      | 1,646,320                  | 12,528,469                  | 0.6                             |
| 1972                | 3,504,381               | 2,235,964                      | 1,268,417                  | 13,796,886                  | 0.6                             |
| 1973                | 4,014,838               | 2,003,023                      | 2,011,815                  | 15,808,701                  | 0.7                             |
| 1974                | 3,336,751               | 1,316,347                      | 2,020,404                  | 17,829,105                  | 0.8                             |
| 1975                | 3,434,998               | 1,364,471                      | 2,070,527                  | 19,899,632                  | 0.9                             |
| 1976                | 3,480,906               | 1,776,889                      | 1,704,017                  | 21,603,649                  | 1.0                             |
| 1977                | 7,410,236               | 3,809,146                      | 3,601,090                  | 25,204,739                  | 1.1                             |
| 1978                | 7,135,302               | 3,645,780                      | 3,489,522                  | 28,694,261                  | 1.3                             |
| 1979                | 8,835,944               | 4,454,323                      | 4,381,621                  | 33,075,882                  | 1.5                             |
| 1980                | 11,773,671              | 6,005,600                      | 5,768,071                  | 38,843,953                  | 1.8                             |
| 1981                | 13,767,229              | 6,922,519                      | 6,844,710                  | 45,688,663                  | 2.1                             |
| 1982                | 12,893,222              | 6,172,440                      | 6,720,782                  | 52,409,445                  | 2.4                             |
| 1983                | 10,681,828              | 5,090,718                      | 5,591,110                  | 58,000,555                  | 2.6                             |
| 1984                | 12,340,158              | 5,779,477                      | 6,560,681                  | 64,561,236                  | 2.9                             |
| 1985                | 12,335,716              | 5,809,900                      | 6,525,816                  | 71,087,052                  | 3.2                             |
| 1986                | 13,924,721              | 6,445,706                      | 7,479,015                  | 78,566,067                  | 3.6                             |
| 1987                | 14,429,005              | 6,735,449                      | 7,693,556                  | 86,259,623                  | 3.9                             |
| 1988                | 16,768,778              | 7,572,266                      | 9,196,512                  | 95,456,135                  | 4.3                             |
| 1989                | 16,076,809              | 7,252,465                      | 8,824,344                  | 104,280,479                 | 4.7                             |
| 1990                | 14,211,699              | 6,340,129                      | 7,871,570                  | 112,152,049                 | 5.1                             |
| 1991                | 14,055,404              | 6,177,631                      | 7,877,773                  | 120,029,822                 | 5.4                             |
| 1992                | 15,725,699              | 6,684,432                      | 9,041,267                  | 129,071,089                 | 5.8                             |
| 1993                | 16,782,844              | 6,927,154                      | 9,855,690                  | 138,926,779                 | 6.3                             |
| 1994                | 19,831,551              | 7,833,004                      | 11,998,547                 | 150,925,326                 | 6.8                             |
| 1995                | 20,426,894              | 8,466,893                      | 11,960,001                 | 162,885,327                 | 7.4                             |
| 1996                | 21,145,502              | 8,570,209                      | 12,575,293                 | 175,460,620                 | 7.9                             |
| 1997                | 23,237,290              | 8,805,768                      | 14,431,522                 | 189,892,142                 | 8.6                             |
| 1998                | 21,334,986              | 7,815,057                      | 13,519,929                 | 203,412,071                 | 9.2                             |
| 1999                | 20,705,156              | 7,239,259                      | 13,465,897                 | 216,877,968                 | 9.8                             |
| 2000                | 21,641,168              | 7,895,378                      | 13,745,790                 | 230,623,758                 | 10.4                            |
| 2001                | 22,002,627              | 7,322,515                      | 14,680,112                 | 245,303,870                 | 11.1                            |
| 2002                | 17,749,748              | 5,842,097                      | 11,907,651                 | 257,211,521                 | 11.6                            |
| 2003                | 21,872,607              | 6,782,408                      | 15,090,199                 | 272,301,720                 | 12.3                            |
| 2004                | 30,203,741              | 8,411,193                      | 21,792,548                 | 294,094,268                 | 13.3                            |
| 2005                | 35,967,856              | 8,968,747                      | 26,999,109                 | 321,093,377                 | 14.5                            |
| 2006                | 24,901,561              | 6,188,331                      | 18,713,230                 | 339,806,607                 | 15.4                            |
| 2007                | 56,856,905              | 12,522,042                     | 44,334,863                 | 384,141,470                 | 17.4                            |
| 2008                | 79,924,323              | 16,399,697                     | 63,524,626                 | 447,666,096                 | 20.2                            |
| 2009                | 55,760,926              | 10,935,793                     | 44,825,133                 | 492,491,229                 | 22.3                            |
| 2010                | 69,484,708              | 12,596,922                     | 56,887,786                 | 549,379,015                 | 24.8                            |
| 2011                | 125,478,543             | 24,305,853                     | 101,172,690                | 650,551,705                 | 29.4                            |
| 2012                | 138,565,864             | 23,019,283                     | 115,546,581                | 766,098,286                 | 34.6                            |

## 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, 2019

| YEAR<br>(1)                       | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| INTERIM SURVIVOR CURVE.. SQUARE   |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 6-2025 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0           |                         |                              |                               |                                |                     |                          |
| 1972                              | 1,896.43                | 1,700                        | 1,895                         | 1                              | 5.50                |                          |
| 1973                              | 35.65                   | 32                           | 36                            |                                |                     |                          |
|                                   | 1,932.08                | 1,732                        | 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 STUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>(1)                           | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|---------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| INTERIM SURVIVOR CURVE.. IOWA 65-R2.5 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 6-2025     |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0               |                         |                              |                               |                                |                     |                          |
| 1970                                  | 124,246.77              | 111,238                      | 102,066                       | 22,181                         | 5.26                | 4,217                    |
| 1971                                  | 44,955.88               | 40,172                       | 36,860                        | 8,096                          | 5.27                | 1,536                    |
| 1972                                  | 23,833.95               | 21,250                       | 19,498                        | 4,336                          | 5.29                | 820                      |
| 1973                                  | 1,046.90                | 931                          | 854                           | 193                            | 5.30                | 36                       |
| 1996                                  | 107,318.16              | 87,260                       | 80,065                        | 27,253                         | 5.40                | 5,047                    |
| 1997                                  | 932.86                  | 751                          | 689                           | 244                            | 5.43                | 45                       |
| 1998                                  | 7,804.72                | 6,225                        | 5,712                         | 2,093                          | 5.46                | 383                      |
| 2001                                  | 87,639.68               | 67,772                       | 62,184                        | 25,456                         | 5.42                | 4,697                    |
| 2003                                  | 212,167.85              | 159,635                      | 146,472                       | 65,696                         | 5.43                | 12,099                   |
| 2004                                  | 195,419.81              | 144,493                      | 132,579                       | 62,841                         | 5.46                | 11,509                   |
| 2008                                  | 670,893.34              | 455,201                      | 417,668                       | 253,225                        | 5.45                | 46,463                   |
| 2009                                  | 11,299.51               | 7,427                        | 6,815                         | 4,485                          | 5.47                | 820                      |
| 2012                                  | 59,116.96               | 34,181                       | 31,363                        | 27,754                         | 5.47                | 5,074                    |
| 2013                                  | 744,499.19              | 404,561                      | 371,203                       | 373,296                        | 5.46                | 68,369                   |
| 2014                                  | 847,869.30              | 425,291                      | 390,224                       | 457,645                        | 5.46                | 83,818                   |
| 2015                                  | 51,937.15               | 23,444                       | 21,511                        | 30,426                         | 5.47                | 5,562                    |
| 2016                                  | 9,550.22                | 3,726                        | 3,419                         | 6,131                          | 5.47                | 1,121                    |
| 2017                                  | 86,590.33               | 27,492                       | 25,225                        | 61,365                         | 5.46                | 11,239                   |
|                                       | 3,287,122.58            | 2,021,050                    | 1,854,407                     | 1,432,716                      |                     | 262,855                  |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.5 8.00

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 352 WELLS - CONSTRUCTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>(1)                                                           | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| INTERIM SURVIVOR CURVE.. SQUARE                                       |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 6-2025                                     |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                               |                         |                              |                               |                                |                     |                          |
| 1970                                                                  | 326,259.85              | 293,634                      | 326,260                       |                                |                     |                          |
| 1971                                                                  | 246,359.45              | 221,268                      | 246,359                       |                                |                     |                          |
| 1972                                                                  | 166,322.06              | 149,063                      | 166,322                       |                                |                     |                          |
| 1978                                                                  | 60,192.37               | 53,149                       | 60,177                        | 15                             | 5.50                | 3                        |
|                                                                       | 799,133.73              | 717,114                      | 799,118                       | 16                             |                     | 3                        |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.3 0.00 |                         |                              |                               |                                |                     |                          |



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 352 WELLS - EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>(1) | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
|-------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|

INTERIM SURVIVOR CURVE.. IOWA 50-S2.5  
PROBABLE RETIREMENT YEAR.. 6-2025  
NET SALVAGE PERCENT.. 0

|      |           |        |        |  |  |  |
|------|-----------|--------|--------|--|--|--|
| 1970 | 62,707.48 | 56,372 | 62,707 |  |  |  |
| 1971 | 61,403.78 | 55,109 | 61,404 |  |  |  |
| 1972 | 42,286.87 | 37,877 | 42,287 |  |  |  |
| 1978 | 2,281.54  | 2,036  | 2,282  |  |  |  |

|  |            |         |         |  |  |  |
|--|------------|---------|---------|--|--|--|
|  | 168,679.67 | 151,394 | 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, 2019

| YEAR<br>(1)                                                           | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| INTERIM SURVIVOR CURVE.. SQUARE                                       |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 6-2025                                     |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                               |                         |                              |                               |                                |                     |                          |
| 1970                                                                  | 206,940.78              | 186,247                      | 206,932                       | 9                              | 5.50                | 2                        |
|                                                                       | 206,940.78              | 186,247                      | 206,932                       | 9                              |                     | 2                        |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 4.5 0.00 |                         |                              |                               |                                |                     |                          |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 353 LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>(1)                                                           | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| INTERIM SURVIVOR CURVE.. IOWA 50-S1.5                                 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 6-2025                                     |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                               |                         |                              |                               |                                |                     |                          |
| 1971                                                                  | 260,327.01              | 231,759                      | 260,327                       |                                |                     |                          |
| 1972                                                                  | 56,879.31               | 50,538                       | 56,879                        |                                |                     |                          |
| 1973                                                                  | 54,831.76               | 48,632                       | 54,832                        |                                |                     |                          |
| 1984                                                                  | 13,885.22               | 12,126                       | 13,885                        |                                |                     |                          |
| 1989                                                                  | 13,619.22               | 11,631                       | 13,620                        |                                |                     |                          |
|                                                                       | 399,542.52              | 354,686                      | 399,543                       |                                |                     |                          |
| 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, 2019

| YEAR<br>(1)                                                           | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| INTERIM SURVIVOR CURVE.. IOWA 55-R2.5                                 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 6-2025                                     |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                               |                         |                              |                               |                                |                     |                          |
| 1950                                                                  | 5,342.87                | 4,924                        | 5,343                         |                                |                     |                          |
| 1952                                                                  | 23,888.55               | 21,970                       | 23,889                        |                                |                     |                          |
| 1957                                                                  | 363.93                  | 333                          | 364                           |                                |                     |                          |
| 1967                                                                  | 1,175.28                | 1,058                        | 1,170                         | 5                              | 4.94                | 1                        |
| 1969                                                                  | 2,168.00                | 1,944                        | 2,151                         | 17                             | 5.01                | 3                        |
| 1970                                                                  | 491,576.16              | 439,798                      | 486,551                       | 5,025                          | 5.04                | 997                      |
| 1971                                                                  | 21,258.89               | 18,980                       | 20,998                        | 261                            | 5.07                | 51                       |
| 1972                                                                  | 4,125.93                | 3,676                        | 4,067                         | 59                             | 5.09                | 12                       |
| 1979                                                                  | 1,860.35                | 1,650                        | 1,825                         | 35                             | 5.16                | 7                        |
| 1987                                                                  | 19,667.77               | 16,875                       | 18,669                        | 999                            | 5.38                | 186                      |
| 1991                                                                  | 11,137.86               | 9,365                        | 10,361                        | 777                            | 5.40                | 144                      |
| 1993                                                                  | 1,506.99                | 1,254                        | 1,387                         | 120                            | 5.35                | 22                       |
| 2013                                                                  | 280,679.08              | 152,521                      | 168,735                       | 111,944                        | 5.46                | 20,503                   |
|                                                                       | 864,751.66              | 674,348                      | 745,510                       | 119,242                        |                     | 21,926                   |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.4 2.54 |                         |                              |                               |                                |                     |                          |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 355 MEASURING AND REGULATING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>(1)                           | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|---------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| INTERIM SURVIVOR CURVE.. IOWA 37-R1.5 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 6-2025     |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0               |                         |                              |                               |                                |                     |                          |
| 1970                                  | 56,228.75               | 49,792                       | 56,229                        |                                |                     |                          |
| 1975                                  | 2,685.09                | 2,349                        | 2,685                         |                                |                     |                          |
| 1981                                  | 13,738.52               | 12,271                       | 13,739                        |                                |                     |                          |
| 1986                                  | 29,489.73               | 25,786                       | 29,490                        |                                |                     |                          |
| 1987                                  | 2,334.83                | 2,026                        | 2,334                         |                                |                     |                          |
|                                       | 104,476.92              | 92,224                       | 104,477                       |                                |                     |                          |

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, 2019

| YEAR<br>(1)                   | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 70-R2.5 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0       |                         |                              |                               |                                |                     |                          |
| 1957                          | 2,713.49                | 1,918                        | 1,765                         | 948                            | 20.52               | 46                       |
| 1961                          | 719.06                  | 485                          | 446                           | 273                            | 22.81               | 12                       |
| 1962                          | 282.94                  | 188                          | 173                           | 110                            | 23.41               | 5                        |
| 1963                          | 5,029.15                | 3,303                        | 3,039                         | 1,990                          | 24.02               | 83                       |
| 1964                          | 3,287.44                | 2,130                        | 1,960                         | 1,327                          | 24.64               | 54                       |
| 1965                          | 1,026.13                | 656                          | 604                           | 422                            | 25.27               | 17                       |
| 1966                          | 2,140.08                | 1,348                        | 1,240                         | 900                            | 25.91               | 35                       |
| 1967                          | 10,364.33               | 6,432                        | 5,918                         | 4,446                          | 26.56               | 167                      |
| 1968                          | 1,821.74                | 1,113                        | 1,024                         | 798                            | 27.22               | 29                       |
| 1969                          | 11,232.43               | 6,759                        | 6,219                         | 5,013                          | 27.88               | 180                      |
| 1970                          | 7,439.64                | 4,404                        | 4,052                         | 3,388                          | 28.56               | 119                      |
| 1971                          | 19,211.91               | 11,187                       | 10,293                        | 8,919                          | 29.24               | 305                      |
| 1972                          | 10,873.12               | 6,223                        | 5,726                         | 5,147                          | 29.94               | 172                      |
| 1973                          | 5,145.34                | 2,893                        | 2,662                         | 2,483                          | 30.64               | 81                       |
| 1974                          | 15,727.19               | 8,684                        | 7,990                         | 7,737                          | 31.35               | 247                      |
| 1975                          | 23,919.47               | 12,964                       | 11,928                        | 11,991                         | 32.06               | 374                      |
| 1976                          | 23,131.33               | 13,886                       | 12,776                        | 10,355                         | 28.96               | 358                      |
| 1977                          | 51,981.62               | 30,711                       | 28,256                        | 23,726                         | 29.44               | 806                      |
| 1978                          | 20,274.28               | 11,779                       | 10,837                        | 9,437                          | 29.93               | 315                      |
| 1979                          | 35,086.36               | 19,894                       | 18,304                        | 16,782                         | 30.93               | 543                      |
| 1980                          | 22,135.16               | 12,329                       | 11,343                        | 10,792                         | 31.42               | 343                      |
| 1981                          | 38,583.45               | 21,094                       | 19,408                        | 19,175                         | 31.92               | 601                      |
| 1982                          | 60,861.76               | 32,634                       | 30,025                        | 30,837                         | 32.43               | 951                      |
| 1983                          | 38,996.66               | 20,356                       | 18,729                        | 20,268                         | 33.43               | 606                      |
| 1984                          | 43,512.41               | 22,244                       | 20,466                        | 23,046                         | 33.94               | 679                      |
| 1985                          | 64,285.16               | 32,155                       | 29,585                        | 34,700                         | 34.47               | 1,007                    |
| 1986                          | 39,019.85               | 19,085                       | 17,559                        | 21,461                         | 34.99               | 613                      |
| 1987                          | 62,405.01               | 29,611                       | 27,244                        | 35,161                         | 35.99               | 977                      |
| 1988                          | 96,706.56               | 44,775                       | 41,196                        | 55,511                         | 36.53               | 1,520                    |
| 1989                          | 128,455.47              | 57,985                       | 53,350                        | 75,105                         | 37.07               | 2,026                    |
| 1990                          | 82,479.86               | 36,258                       | 33,360                        | 49,120                         | 37.61               | 1,306                    |
| 1991                          | 48,380.74               | 20,683                       | 19,030                        | 29,351                         | 38.17               | 769                      |
| 1992                          | 13,244.76               | 5,463                        | 5,026                         | 8,219                          | 39.17               | 210                      |
| 1993                          | 42,658.31               | 17,072                       | 15,707                        | 26,951                         | 39.72               | 679                      |
| 1994                          | 34,793.13               | 13,486                       | 12,408                        | 22,385                         | 40.29               | 556                      |
| 1995                          | 19,014.97               | 7,127                        | 6,557                         | 12,458                         | 40.86               | 305                      |
| 1996                          | 45,453.31               | 16,450                       | 15,135                        | 30,318                         | 41.44               | 732                      |
| 1997                          | 40,863.82               | 14,159                       | 13,027                        | 27,837                         | 42.44               | 656                      |
| 1998                          | 9,085.09                | 3,027                        | 2,785                         | 6,300                          | 43.02               | 146                      |
| 1999                          | 5,967.85                | 1,909                        | 1,756                         | 4,212                          | 43.60               | 97                       |
| 2000                          | 14,086.96               | 4,313                        | 3,968                         | 10,119                         | 44.19               | 229                      |
| 2001                          | 13,506.26               | 3,948                        | 3,632                         | 9,874                          | 44.79               | 220                      |
| 2002                          | 3,002.44                | 835                          | 768                           | 2,234                          | 45.40               | 49                       |

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, 2019

| YEAR<br>(1)                   | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 70-R2.5 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0       |                         |                              |                               |                                |                     |                          |
| 2003                          | 43,340.44               | 11,373                       | 10,464                        | 32,876                         | 46.39               | 709                      |
| 2004                          | 45,967.44               | 11,400                       | 10,489                        | 35,478                         | 47.00               | 755                      |
| 2005                          | 26,615.74               | 6,212                        | 5,716                         | 20,900                         | 47.61               | 439                      |
| 2006                          | 37,443.79               | 8,189                        | 7,535                         | 29,909                         | 48.23               | 620                      |
| 2007                          | 66,612.03               | 13,576                       | 12,491                        | 54,121                         | 48.85               | 1,108                    |
| 2008                          | 27,987.65               | 5,278                        | 4,856                         | 23,132                         | 49.48               | 468                      |
| 2009                          | 154,100.73              | 26,690                       | 24,557                        | 129,544                        | 50.11               | 2,585                    |
| 2010                          | 80,161.60               | 12,714                       | 11,698                        | 68,464                         | 50.38               | 1,359                    |
| 2011                          | 76,548.08               | 10,931                       | 10,057                        | 66,491                         | 51.02               | 1,303                    |
| 2012                          | 207,316.89              | 26,288                       | 24,187                        | 183,130                        | 51.67               | 3,544                    |
| 2013                          | 198,835.04              | 22,110                       | 20,343                        | 178,492                        | 51.98               | 3,434                    |
| 2014                          | 95,574.12               | 9,041                        | 8,318                         | 87,256                         | 52.64               | 1,658                    |
| 2015                          | 126,983.27              | 9,943                        | 9,148                         | 117,835                        | 52.97               | 2,225                    |
| 2016                          | 171,663.73              | 10,643                       | 9,793                         | 161,871                        | 52.99               | 3,055                    |
| 2017                          | 76,985.85               | 3,503                        | 3,223                         | 73,763                         | 53.32               | 1,383                    |
| 2018                          | 249,757.94              | 6,893                        | 6,342                         | 243,416                        | 52.85               | 4,606                    |
| 2019                          | 223,286.00              | 2,188                        | 2,013                         | 221,273                        | 50.78               | 4,357                    |
|                               | 3,128,086.38            | 780,927                      | 718,506                       | 2,409,580                      |                     | 52,833                   |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 45.6 1.69

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, 2019

| YEAR<br>(1)                 | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 80-S4 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1883                        | 866.25                  | 854                          | 866                           |                                |                     |                          |
| 1884                        | 2,319.40                | 2,283                        | 2,319                         |                                |                     |                          |
| 1885                        | 952.00                  | 936                          | 952                           |                                |                     |                          |
| 1886                        | 9,401.15                | 9,226                        | 9,401                         |                                |                     |                          |
| 1887                        | 4,690.00                | 4,599                        | 4,690                         |                                |                     |                          |
| 1888                        | 6,579.75                | 6,443                        | 6,580                         |                                |                     |                          |
| 1889                        | 6,551.18                | 6,406                        | 6,551                         |                                |                     |                          |
| 1890                        | 1,679.50                | 1,640                        | 1,680                         |                                |                     |                          |
| 1891                        | 8,350.23                | 8,147                        | 8,350                         |                                |                     |                          |
| 1892                        | 1,354.95                | 1,320                        | 1,355                         |                                |                     |                          |
| 1893                        | 650.85                  | 633                          | 651                           |                                |                     |                          |
| 1894                        | 1,616.78                | 1,571                        | 1,617                         |                                |                     |                          |
| 1895                        | 1,133.20                | 1,100                        | 1,133                         |                                |                     |                          |
| 1896                        | 4,260.56                | 4,129                        | 4,261                         |                                |                     |                          |
| 1897                        | 2,267.65                | 2,194                        | 2,268                         |                                |                     |                          |
| 1898                        | 1,633.73                | 1,579                        | 1,634                         |                                |                     |                          |
| 1899                        | 934.25                  | 902                          | 934                           |                                |                     |                          |
| 1900                        | 8,185.42                | 7,887                        | 8,185                         |                                |                     |                          |
| 1901                        | 15,227.76               | 14,649                       | 15,228                        |                                |                     |                          |
| 1902                        | 7,330.74                | 7,041                        | 7,331                         |                                |                     |                          |
| 1903                        | 15,446.32               | 14,813                       | 15,446                        |                                |                     |                          |
| 1904                        | 8,443.31                | 8,084                        | 8,443                         |                                |                     |                          |
| 1905                        | 13,211.32               | 12,627                       | 13,211                        |                                |                     |                          |
| 1906                        | 5,826.89                | 5,560                        | 5,827                         |                                |                     |                          |
| 1907                        | 4,318.72                | 4,114                        | 4,319                         |                                |                     |                          |
| 1908                        | 5,084.82                | 4,835                        | 5,085                         |                                |                     |                          |
| 1909                        | 5,578.23                | 5,294                        | 5,578                         |                                |                     |                          |
| 1910                        | 944.58                  | 895                          | 945                           |                                |                     |                          |
| 1911                        | 1,805.52                | 1,707                        | 1,806                         |                                |                     |                          |
| 1912                        | 1,590.08                | 1,500                        | 1,590                         |                                |                     |                          |
| 1913                        | 4,199.64                | 3,954                        | 4,200                         |                                |                     |                          |
| 1914                        | 6,522.34                | 6,128                        | 6,522                         |                                |                     |                          |
| 1915                        | 9,299.36                | 8,718                        | 9,299                         |                                |                     |                          |
| 1916                        | 2,133.53                | 1,996                        | 2,134                         |                                |                     |                          |
| 1917                        | 2,947.27                | 2,750                        | 2,947                         |                                |                     |                          |
| 1918                        | 969.85                  | 903                          | 969                           | 1                              | 5.53                |                          |
| 1919                        | 713.16                  | 662                          | 710                           | 3                              | 5.71                | 1                        |
| 1920                        | 1,116.43                | 1,034                        | 1,109                         | 7                              | 5.90                | 1                        |
| 1921                        | 2,386.50                | 2,205                        | 2,366                         | 20                             | 6.10                | 3                        |
| 1922                        | 5,478.84                | 5,047                        | 5,414                         | 65                             | 6.30                | 10                       |
| 1923                        | 5,748.64                | 5,281                        | 5,665                         | 84                             | 6.51                | 13                       |
| 1924                        | 2,962.36                | 2,714                        | 2,912                         | 50                             | 6.72                | 7                        |
| 1925                        | 8,085.67                | 7,383                        | 7,920                         | 166                            | 6.95                | 24                       |



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, 2019

| YEAR<br>(1)                 | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 80-S4 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1926                        | 3,690.49                | 3,360                        | 3,605                         | 85                             | 7.17                | 12                       |
| 1927                        | 3,441.21                | 3,122                        | 3,349                         | 92                             | 7.41                | 12                       |
| 1928                        | 3,616.30                | 3,270                        | 3,508                         | 108                            | 7.66                | 14                       |
| 1929                        | 9,736.71                | 8,774                        | 9,413                         | 324                            | 7.91                | 41                       |
| 1930                        | 3,705.73                | 3,327                        | 3,569                         | 137                            | 8.17                | 17                       |
| 1931                        | 4,695.61                | 4,200                        | 4,506                         | 190                            | 8.44                | 23                       |
| 1932                        | 2,031.20                | 1,810                        | 1,942                         | 89                             | 8.72                | 10                       |
| 1933                        | 2,540.95                | 2,254                        | 2,418                         | 123                            | 9.02                | 14                       |
| 1934                        | 4,020.82                | 3,552                        | 3,811                         | 210                            | 9.32                | 23                       |
| 1935                        | 866.62                  | 762                          | 817                           | 50                             | 9.63                | 5                        |
| 1936                        | 4,994.63                | 4,373                        | 4,691                         | 304                            | 9.95                | 31                       |
| 1937                        | 3,607.79                | 3,144                        | 3,373                         | 235                            | 10.29               | 23                       |
| 1938                        | 1,245.49                | 1,080                        | 1,159                         | 86                             | 10.64               | 8                        |
| 1939                        | 956.06                  | 825                          | 885                           | 71                             | 11.00               | 6                        |
| 1940                        | 13,850.45               | 11,880                       | 12,745                        | 1,105                          | 11.38               | 97                       |
| 1941                        | 4,887.61                | 4,169                        | 4,472                         | 416                            | 11.77               | 35                       |
| 1942                        | 8,169.68                | 6,927                        | 7,431                         | 739                            | 12.17               | 61                       |
| 1943                        | 1,693.42                | 1,427                        | 1,531                         | 162                            | 12.59               | 13                       |
| 1944                        | 3,627.62                | 3,037                        | 3,258                         | 370                            | 13.03               | 28                       |
| 1945                        | 1,007.81                | 838                          | 899                           | 109                            | 13.48               | 8                        |
| 1946                        | 623.85                  | 515                          | 552                           | 72                             | 13.95               | 5                        |
| 1947                        | 215.02                  | 176                          | 189                           | 26                             | 14.43               | 2                        |
| 1948                        | 3,109.38                | 2,529                        | 2,713                         | 396                            | 14.94               | 27                       |
| 1949                        | 16,198.32               | 13,068                       | 14,019                        | 2,179                          | 15.46               | 141                      |
| 1950                        | 20,944.17               | 16,755                       | 17,975                        | 2,969                          | 16.00               | 186                      |
| 1951                        | 11,956.42               | 9,481                        | 10,171                        | 1,785                          | 16.56               | 108                      |
| 1952                        | 8,038.39                | 6,316                        | 6,776                         | 1,262                          | 17.14               | 74                       |
| 1953                        | 5,949.87                | 4,630                        | 4,967                         | 983                            | 17.74               | 55                       |
| 1954                        | 21,585.01               | 16,631                       | 17,842                        | 3,743                          | 18.36               | 204                      |
| 1955                        | 32,149.56               | 24,510                       | 26,294                        | 5,856                          | 19.01               | 308                      |
| 1956                        | 51,558.51               | 38,881                       | 41,711                        | 9,848                          | 19.67               | 501                      |
| 1957                        | 19,916.61               | 14,850                       | 15,931                        | 3,986                          | 20.35               | 196                      |
| 1958                        | 63,499.25               | 46,791                       | 50,197                        | 13,302                         | 21.05               | 632                      |
| 1959                        | 28,371.09               | 20,647                       | 22,150                        | 6,221                          | 21.78               | 286                      |
| 1960                        | 26,305.63               | 18,901                       | 20,277                        | 6,029                          | 22.52               | 268                      |
| 1961                        | 15,768.03               | 11,180                       | 11,994                        | 3,774                          | 23.28               | 162                      |
| 1962                        | 18,087.78               | 12,648                       | 13,569                        | 4,519                          | 24.06               | 188                      |
| 1963                        | 27,374.57               | 18,864                       | 20,237                        | 7,138                          | 24.87               | 287                      |
| 1964                        | 40,027.79               | 27,174                       | 29,152                        | 10,876                         | 25.69               | 423                      |
| 1965                        | 17,574.04               | 11,748                       | 12,603                        | 4,971                          | 26.52               | 187                      |
| 1966                        | 18,597.25               | 12,232                       | 13,122                        | 5,475                          | 27.38               | 200                      |
| 1967                        | 96,910.77               | 62,690                       | 67,253                        | 29,658                         | 28.25               | 1,050                    |
| 1968                        | 82,637.79               | 52,548                       | 56,373                        | 26,265                         | 29.13               | 902                      |

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, 2019

| YEAR<br>(1)                 | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 80-S4 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1969                        | 46,057.56               | 28,768                       | 30,862                        | 15,196                         | 30.03               | 506                      |
| 1970                        | 45,097.36               | 27,656                       | 29,669                        | 15,428                         | 30.94               | 499                      |
| 1971                        | 54,600.87               | 32,856                       | 35,248                        | 19,353                         | 31.86               | 607                      |
| 1972                        | 80,822.88               | 47,685                       | 51,156                        | 29,667                         | 32.80               | 904                      |
| 1973                        | 31,060.02               | 17,960                       | 19,267                        | 11,793                         | 33.74               | 350                      |
| 1974                        | 42,716.26               | 24,194                       | 25,955                        | 16,761                         | 34.69               | 483                      |
| 1975                        | 53,203.52               | 29,495                       | 31,642                        | 21,562                         | 35.65               | 605                      |
| 1976                        | 46,796.87               | 26,262                       | 28,174                        | 18,623                         | 34.02               | 547                      |
| 1977                        | 50,016.13               | 27,419                       | 29,415                        | 20,601                         | 35.02               | 588                      |
| 1978                        | 27,600.77               | 14,777                       | 15,853                        | 11,748                         | 36.02               | 326                      |
| 1979                        | 28,400.77               | 14,837                       | 15,917                        | 12,484                         | 37.02               | 337                      |
| 1980                        | 24,054.08               | 12,258                       | 13,150                        | 10,904                         | 38.02               | 287                      |
| 1981                        | 55,235.53               | 27,430                       | 29,427                        | 25,809                         | 39.02               | 661                      |
| 1982                        | 47,534.94               | 22,997                       | 24,671                        | 22,864                         | 40.02               | 571                      |
| 1983                        | 27,148.25               | 12,781                       | 13,711                        | 13,437                         | 41.02               | 328                      |
| 1984                        | 30,306.87               | 13,881                       | 14,891                        | 15,416                         | 42.02               | 367                      |
| 1985                        | 72,105.59               | 32,087                       | 34,423                        | 37,683                         | 43.02               | 876                      |
| 1986                        | 17,533.91               | 7,578                        | 8,130                         | 9,404                          | 44.02               | 214                      |
| 1987                        | 27,416.83               | 11,493                       | 12,330                        | 15,087                         | 45.02               | 335                      |
| 1988                        | 11,339.22               | 4,608                        | 4,943                         | 6,396                          | 46.02               | 139                      |
| 1989                        | 70,100.72               | 27,578                       | 29,586                        | 40,515                         | 47.02               | 862                      |
| 1990                        | 44,760.66               | 17,036                       | 18,276                        | 26,485                         | 48.02               | 552                      |
| 1991                        | 35,224.46               | 12,949                       | 13,892                        | 21,332                         | 49.02               | 435                      |
| 1992                        | 54,141.31               | 19,209                       | 20,607                        | 33,534                         | 50.02               | 670                      |
| 1993                        | 58,993.43               | 20,164                       | 21,632                        | 37,361                         | 51.02               | 732                      |
| 1994                        | 184,531.84              | 60,711                       | 65,130                        | 119,402                        | 52.02               | 2,295                    |
| 1995                        | 584,928.49              | 184,837                      | 198,292                       | 386,636                        | 53.02               | 7,292                    |
| 1996                        | 126,940.88              | 38,488                       | 41,290                        | 85,651                         | 54.02               | 1,586                    |
| 1997                        | 68,030.65               | 19,742                       | 21,179                        | 46,852                         | 55.02               | 852                      |
| 1998                        | 40,132.45               | 11,133                       | 11,943                        | 28,189                         | 56.02               | 503                      |
| 2000                        | 15,568.19               | 3,917                        | 4,202                         | 11,366                         | 58.02               | 196                      |
| 2001                        | 39,714.12               | 9,476                        | 10,166                        | 29,548                         | 59.02               | 501                      |
| 2002                        | 181,571.19              | 40,999                       | 43,983                        | 137,588                        | 60.02               | 2,292                    |
| 2003                        | 1,938.28                | 412                          | 442                           | 1,496                          | 61.02               | 25                       |
| 2006                        | 3,432.18                | 598                          | 642                           | 2,790                          | 64.02               | 44                       |
|                             | 3,239,641.11            | 1,611,910                    | 1,723,948                     | 1,515,693                      |                     | 35,299                   |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 42.9 1.09

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, 2019

| YEAR<br>(1)                  | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE... IOWA 60-R1 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT... 0     |                         |                              |                               |                                |                     |                          |
| 1925                         | 128.84                  | 111                          | 98                            | 31                             | 8.25                | 4                        |
| 1927                         | 179.15                  | 153                          | 135                           | 44                             | 8.90                | 5                        |
| 1928                         | 453.29                  | 383                          | 338                           | 115                            | 9.24                | 12                       |
| 1929                         | 3,434.48                | 2,886                        | 2,549                         | 885                            | 9.58                | 92                       |
| 1930                         | 3,969.13                | 3,313                        | 2,927                         | 1,042                          | 9.92                | 105                      |
| 1931                         | 1,027.07                | 851                          | 752                           | 275                            | 10.26               | 27                       |
| 1932                         | 1,951.21                | 1,606                        | 1,419                         | 532                            | 10.61               | 50                       |
| 1933                         | 4,472.97                | 3,655                        | 3,229                         | 1,244                          | 10.97               | 113                      |
| 1934                         | 1,747.48                | 1,418                        | 1,253                         | 494                            | 11.32               | 44                       |
| 1935                         | 83.73                   | 67                           | 59                            | 25                             | 11.69               | 2                        |
| 1936                         | 2,125.02                | 1,698                        | 1,500                         | 625                            | 12.05               | 52                       |
| 1938                         | 543.33                  | 427                          | 377                           | 166                            | 12.80               | 13                       |
| 1939                         | 6,922.05                | 5,401                        | 4,771                         | 2,151                          | 13.18               | 163                      |
| 1940                         | 492.26                  | 381                          | 337                           | 155                            | 13.56               | 11                       |
| 1941                         | 801.08                  | 615                          | 543                           | 258                            | 13.95               | 18                       |
| 1942                         | 104.21                  | 79                           | 70                            | 34                             | 14.35               | 2                        |
| 1943                         | 626.22                  | 472                          | 417                           | 209                            | 14.74               | 14                       |
| 1945                         | 580.80                  | 430                          | 380                           | 201                            | 15.55               | 13                       |
| 1946                         | 933.87                  | 685                          | 605                           | 329                            | 15.97               | 21                       |
| 1947                         | 2,534.66                | 1,843                        | 1,628                         | 907                            | 16.38               | 55                       |
| 1948                         | 6,164.59                | 4,437                        | 3,920                         | 2,245                          | 16.81               | 134                      |
| 1949                         | 1,065.36                | 759                          | 670                           | 395                            | 17.23               | 23                       |
| 1950                         | 4,658.27                | 3,287                        | 2,904                         | 1,754                          | 17.66               | 99                       |
| 1951                         | 11,427.31               | 7,980                        | 7,049                         | 4,378                          | 18.10               | 242                      |
| 1952                         | 30,386.95               | 20,997                       | 18,549                        | 11,838                         | 18.54               | 639                      |
| 1953                         | 26,952.90               | 18,422                       | 16,274                        | 10,679                         | 18.99               | 562                      |
| 1954                         | 16,313.30               | 11,025                       | 9,739                         | 6,574                          | 19.45               | 338                      |
| 1955                         | 14,774.57               | 9,874                        | 8,723                         | 6,052                          | 19.90               | 304                      |
| 1956                         | 36,981.92               | 24,427                       | 21,579                        | 15,403                         | 20.37               | 756                      |
| 1957                         | 77,806.89               | 50,782                       | 44,860                        | 32,947                         | 20.84               | 1,581                    |
| 1958                         | 60,494.00               | 39,008                       | 34,459                        | 26,035                         | 21.31               | 1,222                    |
| 1959                         | 39,088.81               | 24,893                       | 21,990                        | 17,099                         | 21.79               | 785                      |
| 1960                         | 107,063.99              | 67,308                       | 59,459                        | 47,605                         | 22.28               | 2,137                    |
| 1961                         | 54,634.21               | 33,901                       | 29,948                        | 24,686                         | 22.77               | 1,084                    |
| 1962                         | 90,112.96               | 55,164                       | 48,731                        | 41,382                         | 23.27               | 1,778                    |
| 1963                         | 31,696.79               | 19,139                       | 16,907                        | 14,790                         | 23.77               | 622                      |
| 1964                         | 45,260.60               | 26,945                       | 23,803                        | 21,458                         | 24.28               | 884                      |
| 1965                         | 27,969.26               | 16,413                       | 14,499                        | 13,470                         | 24.79               | 543                      |
| 1966                         | 26,035.58               | 15,049                       | 13,294                        | 12,742                         | 25.32               | 503                      |
| 1967                         | 24,218.84               | 13,789                       | 12,181                        | 12,038                         | 25.84               | 466                      |
| 1968                         | 8,140.62                | 4,563                        | 4,031                         | 4,110                          | 26.37               | 156                      |
| 1969                         | 17,567.52               | 9,688                        | 8,558                         | 9,010                          | 26.91               | 335                      |
| 1970                         | 5,704.72                | 3,094                        | 2,733                         | 2,972                          | 27.46               | 108                      |

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, 2019

| YEAR<br>(1)                 | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 60-R1 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1971                        | 35,618.92               | 18,991                       | 16,777                        | 18,842                         | 28.01               | 673                      |
| 1972                        | 11,510.14               | 6,031                        | 5,328                         | 6,182                          | 28.56               | 216                      |
| 1973                        | 12,927.20               | 6,653                        | 5,877                         | 7,050                          | 29.12               | 242                      |
| 1974                        | 12,199.00               | 6,163                        | 5,444                         | 6,755                          | 29.69               | 228                      |
| 1975                        | 16,341.58               | 8,100                        | 7,155                         | 9,187                          | 30.26               | 304                      |
| 1976                        | 25,520.53               | 15,874                       | 14,023                        | 11,498                         | 26.43               | 435                      |
| 1977                        | 21,910.65               | 13,409                       | 11,845                        | 10,066                         | 26.94               | 374                      |
| 1978                        | 34,410.02               | 20,708                       | 18,293                        | 16,117                         | 27.46               | 587                      |
| 1979                        | 36,511.24               | 21,739                       | 19,204                        | 17,307                         | 27.52               | 629                      |
| 1980                        | 27,056.36               | 15,817                       | 13,973                        | 13,083                         | 28.07               | 466                      |
| 1981                        | 26,994.96               | 15,484                       | 13,678                        | 13,317                         | 28.62               | 465                      |
| 1982                        | 40,798.52               | 22,949                       | 20,273                        | 20,526                         | 29.17               | 704                      |
| 1983                        | 29,121.49               | 16,157                       | 14,273                        | 14,848                         | 29.29               | 507                      |
| 1984                        | 18,328.06               | 9,956                        | 8,795                         | 9,533                          | 29.86               | 319                      |
| 1985                        | 12,505.72               | 6,644                        | 5,869                         | 6,637                          | 30.44               | 218                      |
| 1986                        | 25,819.73               | 13,493                       | 11,920                        | 13,900                         | 30.60               | 454                      |
| 1987                        | 3,203.56                | 1,634                        | 1,443                         | 1,761                          | 31.20               | 56                       |
| 1988                        | 28,720.23               | 14,383                       | 12,706                        | 16,014                         | 31.40               | 510                      |
| 1989                        | 30,033.33               | 14,656                       | 12,947                        | 17,086                         | 32.00               | 534                      |
| 1990                        | 18,127.33               | 8,663                        | 7,653                         | 10,474                         | 32.23               | 325                      |
| 1991                        | 35,110.85               | 16,313                       | 14,411                        | 20,700                         | 32.85               | 630                      |
| 1992                        | 127.44                  | 58                           | 51                            | 76                             | 33.10               | 2                        |
| 1993                        | 23,092.22               | 10,221                       | 9,029                         | 14,063                         | 33.38               | 421                      |
| 1994                        | 1,486.52                | 637                          | 563                           | 924                            | 34.02               | 27                       |
| 1995                        | 13,378.04               | 5,572                        | 4,922                         | 8,456                          | 34.32               | 246                      |
| 1996                        | 49,797.40               | 20,128                       | 17,781                        | 32,016                         | 34.64               | 924                      |
| 1997                        | 20,263.84               | 7,933                        | 7,008                         | 13,256                         | 34.97               | 379                      |
| 1998                        | 63,023.41               | 23,848                       | 21,067                        | 41,956                         | 35.32               | 1,188                    |
| 1999                        | 2,512.79                | 917                          | 810                           | 1,703                          | 35.68               | 48                       |
| 2000                        | 27,722.09               | 9,786                        | 8,645                         | 19,077                         | 35.75               | 534                      |
| 2001                        | 26,494.65               | 8,971                        | 7,925                         | 18,570                         | 36.14               | 514                      |
| 2002                        | 34,465.77               | 11,160                       | 9,859                         | 24,607                         | 36.55               | 673                      |
| 2003                        | 61,785.59               | 19,166                       | 16,931                        | 44,855                         | 36.69               | 1,223                    |
| 2004                        | 34,723.60               | 10,278                       | 9,080                         | 25,644                         | 36.86               | 696                      |
| 2005                        | 51,657.88               | 14,531                       | 12,837                        | 38,821                         | 37.05               | 1,048                    |
| 2006                        | 80,800.17               | 21,493                       | 18,987                        | 61,813                         | 37.26               | 1,659                    |
| 2007                        | 188,315.02              | 47,079                       | 41,589                        | 146,726                        | 37.50               | 3,913                    |
| 2008                        | 463,093.29              | 108,642                      | 95,974                        | 367,119                        | 37.52               | 9,785                    |
| 2009                        | 102,194.43              | 22,319                       | 19,717                        | 82,477                         | 37.58               | 2,195                    |
| 2010                        | 173,160.54              | 34,875                       | 30,808                        | 142,353                        | 37.67               | 3,779                    |
| 2011                        | 202,614.53              | 37,362                       | 33,005                        | 169,610                        | 37.59               | 4,512                    |
| 2012                        | 575,137.87              | 96,163                       | 84,950                        | 490,188                        | 37.35               | 13,124                   |
| 2013                        | 236,406.21              | 35,177                       | 31,075                        | 205,331                        | 37.17               | 5,524                    |

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, 2019

| YEAR<br>(1)                                                  | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|--------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 60-R1                                  |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                      |                         |                              |                               |                                |                     |                          |
| 2014                                                         | 389,929.05              | 50,613                       | 44,712                        | 345,217                        | 36.87               | 9,363                    |
| 2015                                                         | 914,226.78              | 100,748                      | 89,000                        | 825,227                        | 36.32               | 22,721                   |
| 2016                                                         | 389,737.52              | 34,920                       | 30,849                        | 358,889                        | 35.56               | 10,092                   |
| 2017                                                         | 199,233.51              | 13,667                       | 12,073                        | 187,161                        | 34.50               | 5,425                    |
|                                                              | 5,625,780.39            | 1,527,499                    | 1,349,381                     | 4,276,399                      |                     | 125,008                  |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. |                         |                              |                               |                                |                     | 34.2 2.22                |

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, 2019

| YEAR<br>(1)                 | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 55-R1 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1922                        | 114.31                  | 106                          | 114                           |                                |                     |                          |
| 1928                        | 87.15                   | 78                           | 87                            |                                |                     |                          |
| 1930                        | 127.57                  | 112                          | 128                           |                                |                     |                          |
| 1931                        | 263.40                  | 230                          | 263                           |                                |                     |                          |
| 1934                        | 783.68                  | 671                          | 784                           |                                |                     |                          |
| 1935                        | 147.25                  | 125                          | 147                           |                                |                     |                          |
| 1936                        | 21.46                   | 18                           | 21                            |                                |                     |                          |
| 1937                        | 618.76                  | 518                          | 619                           |                                |                     |                          |
| 1938                        | 1,463.03                | 1,216                        | 1,463                         |                                |                     |                          |
| 1940                        | 440.04                  | 360                          | 440                           |                                |                     |                          |
| 1942                        | 1,018.37                | 820                          | 1,018                         |                                |                     |                          |
| 1944                        | 2,850.41                | 2,258                        | 2,850                         |                                |                     |                          |
| 1946                        | 377.07                  | 293                          | 377                           |                                |                     |                          |
| 1947                        | 568.77                  | 439                          | 569                           |                                |                     |                          |
| 1948                        | 482.71                  | 369                          | 482                           | 1                              | 12.97               |                          |
| 1950                        | 1,857.60                | 1,393                        | 1,818                         | 40                             | 13.77               | 3                        |
| 1951                        | 3,131.90                | 2,325                        | 3,035                         | 97                             | 14.17               | 7                        |
| 1952                        | 3,969.07                | 2,917                        | 3,807                         | 162                            | 14.58               | 11                       |
| 1953                        | 4,259.74                | 3,098                        | 4,043                         | 217                            | 15.00               | 14                       |
| 1955                        | 4,904.63                | 3,491                        | 4,556                         | 349                            | 15.85               | 22                       |
| 1956                        | 2,507.83                | 1,766                        | 2,305                         | 203                            | 16.28               | 12                       |
| 1957                        | 14,375.38               | 10,005                       | 13,059                        | 1,316                          | 16.72               | 79                       |
| 1958                        | 1,667.93                | 1,147                        | 1,497                         | 171                            | 17.17               | 10                       |
| 1959                        | 5,902.55                | 4,012                        | 5,236                         | 667                            | 17.62               | 38                       |
| 1960                        | 1,345.00                | 903                          | 1,179                         | 166                            | 18.07               | 9                        |
| 1961                        | 1,954.81                | 1,296                        | 1,692                         | 263                            | 18.53               | 14                       |
| 1963                        | 3,416.99                | 2,207                        | 2,881                         | 536                            | 19.48               | 28                       |
| 1964                        | 1,441.97                | 919                          | 1,199                         | 243                            | 19.96               | 12                       |
| 1967                        | 1,614.49                | 985                          | 1,286                         | 328                            | 21.43               | 15                       |
| 1970                        | 2,450.11                | 1,427                        | 1,862                         | 588                            | 22.97               | 26                       |
| 1971                        | 7,721.50                | 4,424                        | 5,774                         | 1,948                          | 23.49               | 83                       |
| 1972                        | 1.00                    | 1                            | 1                             |                                |                     |                          |
| 1980                        | 3,885.67                | 2,394                        | 3,125                         | 761                            | 24.60               | 31                       |
| 1988                        | 11,897.69               | 6,334                        | 8,267                         | 3,631                          | 27.67               | 131                      |
|                             | 87,669.84               | 58,657                       | 75,984                        | 11,686                         |                     | 545                      |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 21.4 0.62

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, 2019

| YEAR<br>(1) | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
|-------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|

GETTYSBURG GARAGE  
FULLY ACCRUED  
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-R1.5  
PROBABLE RETIREMENT YEAR.. 6-2033  
NET SALVAGE PERCENT.. 0

|      |            |         |         |         |       |        |
|------|------------|---------|---------|---------|-------|--------|
| 1958 | 23,203.80  | 18,713  | 21,109  | 2,094   | 12.67 | 165    |
| 1959 | 530.28     | 426     | 481     | 50      | 12.69 | 4      |
| 1978 | 1,767.28   | 1,349   | 1,522   | 246     | 12.85 | 19     |
| 1985 | 19,951.17  | 14,524  | 16,384  | 3,567   | 12.89 | 277    |
| 1987 | 7,647.96   | 5,468   | 6,168   | 1,480   | 12.95 | 114    |
| 1995 | 8,147.09   | 5,309   | 5,989   | 2,158   | 13.09 | 165    |
| 1998 | 14,593.54  | 9,068   | 10,229  | 4,364   | 13.10 | 333    |
| 1999 | 5,204.23   | 3,179   | 3,586   | 1,618   | 13.06 | 124    |
| 2003 | 17,099.66  | 9,536   | 10,757  | 6,343   | 13.09 | 485    |
| 2007 | 4,558.44   | 2,228   | 2,513   | 2,045   | 13.07 | 156    |
| 2010 | 1,391.88   | 586     | 661     | 731     | 13.07 | 56     |
| 2012 | 15,971.90  | 5,822   | 6,568   | 9,404   | 13.08 | 719    |
| 2014 | 1,825.22   | 541     | 610     | 1,215   | 13.05 | 93     |
| 2015 | 221,738.88 | 56,876  | 64,159  | 157,579 | 13.04 | 12,084 |
| 2016 | 74,700.89  | 15,844  | 17,873  | 56,828  | 13.00 | 4,371  |
| 2018 | 165,454.00 | 17,306  | 19,522  | 145,932 | 12.85 | 11,357 |
| 2019 | 96,215.00  | 3,695   | 4,168   | 92,047  | 12.52 | 7,352  |
|      | 680,001.22 | 170,470 | 192,300 | 487,701 |       | 37,874 |

WASHINGTON SERVICE CENTER  
INTERIM SURVIVOR CURVE.. IOWA 90-R1.5  
PROBABLE RETIREMENT YEAR.. 6-2030  
NET SALVAGE PERCENT.. 0

|      |        |     |     |   |      |
|------|--------|-----|-----|---|------|
| 1928 | 539.04 | 476 | 537 | 2 | 9.42 |
| 1933 | 401.96 | 353 | 398 | 4 | 9.55 |
| 1937 | 77.17  | 67  | 76  | 2 | 9.64 |

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, 2019

| YEAR<br>(1)                           | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|---------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| WASHINGTON SERVICE CENTER             |                         |                              |                               |                                |                     |                          |
| INTERIM SURVIVOR CURVE.. IOWA 90-R1.5 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 6-2030     |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0               |                         |                              |                               |                                |                     |                          |
| 1955                                  | 8,925.95                | 7,567                        | 8,536                         | 390                            | 9.97                | 39                       |
| 1957                                  | 17,943.97               | 15,148                       | 17,088                        | 856                            | 9.99                | 86                       |
| 1958                                  | 1,091.86                | 920                          | 1,038                         | 54                             | 10.01               | 5                        |
| 1962                                  | 275.80                  | 230                          | 259                           | 16                             | 10.06               | 2                        |
| 1963                                  | 17,141.83               | 14,258                       | 16,084                        | 1,058                          | 10.07               | 105                      |
| 1964                                  | 81,035.39               | 67,221                       | 75,829                        | 5,206                          | 10.08               | 516                      |
| 1965                                  | 2,232.00                | 1,846                        | 2,082                         | 150                            | 10.09               | 15                       |
| 1968                                  | 462.64                  | 379                          | 428                           | 35                             | 10.12               | 3                        |
| 1969                                  | 861.74                  | 704                          | 794                           | 68                             | 10.13               | 7                        |
| 1973                                  | 1,166.63                | 939                          | 1,059                         | 107                            | 10.17               | 11                       |
| 1976                                  | 1,998.47                | 1,617                        | 1,824                         | 174                            | 10.26               | 17                       |
| 1978                                  | 1,705.03                | 1,373                        | 1,549                         | 156                            | 10.05               | 16                       |
| 1982                                  | 1,111.41                | 875                          | 987                           | 124                            | 10.12               | 12                       |
| 1984                                  | 4,760.67                | 3,701                        | 4,175                         | 586                            | 10.16               | 58                       |
| 1985                                  | 911.17                  | 704                          | 794                           | 117                            | 10.14               | 12                       |
| 1987                                  | 180,447.17              | 137,230                      | 154,803                       | 25,644                         | 10.24               | 2,504                    |
| 1995                                  | 194,747.16              | 137,414                      | 155,011                       | 39,736                         | 10.22               | 3,888                    |
| 1996                                  | 41,750.41               | 29,042                       | 32,761                        | 8,989                          | 10.28               | 874                      |
| 1997                                  | 51,204.74               | 35,137                       | 39,637                        | 11,568                         | 10.29               | 1,124                    |
| 1998                                  | 27,872.99               | 18,876                       | 21,293                        | 6,580                          | 10.25               | 642                      |
| 2005                                  | 152,784.63              | 89,501                       | 100,962                       | 51,822                         | 10.25               | 5,056                    |
| 2006                                  | 8,853.44                | 5,032                        | 5,676                         | 3,177                          | 10.25               | 310                      |
| 2008                                  | 7,810.00                | 4,122                        | 4,650                         | 3,160                          | 10.29               | 307                      |
| 2010                                  | 86,191.80               | 41,432                       | 46,738                        | 39,454                         | 10.26               | 3,845                    |
| 2011                                  | 15,761.85               | 7,140                        | 8,054                         | 7,708                          | 10.26               | 751                      |
| 2013                                  | 102,652.64              | 39,829                       | 44,929                        | 57,723                         | 10.25               | 5,632                    |
| 2015                                  | 29,890.28               | 9,120                        | 10,288                        | 19,602                         | 10.25               | 1,912                    |
| 2016                                  | 11,433.54               | 2,918                        | 3,292                         | 8,142                          | 10.22               | 797                      |
| 2017                                  | 121,873.14              | 24,314                       | 27,428                        | 94,446                         | 10.20               | 9,259                    |
| 2018                                  | 165,454.00              | 21,344                       | 24,077                        | 141,377                        | 10.13               | 13,956                   |
| 2019                                  | 96,215.00               | 4,609                        | 5,199                         | 91,016                         | 9.94                | 9,157                    |
|                                       | 1,437,585.52            | 725,438                      | 818,336                       | 619,250                        |                     | 60,918                   |



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, 2019

| YEAR<br>(1) | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
|-------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|

BRADFORD OFFICE  
FULLY ACCRUED  
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    |  |  |  |
| 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 |  |  |  |

HANOVER SERVICE CENTER  
INTERIM SURVIVOR CURVE.. IOWA 90-R1.5  
PROBABLE RETIREMENT YEAR.. 6-2029  
NET SALVAGE PERCENT.. 0

|      |            |         |         |         |      |        |
|------|------------|---------|---------|---------|------|--------|
| 1939 | 1,201.91   | 1,059   | 1,199   | 3       | 8.84 |        |
| 1949 | 338.10     | 294     | 333     | 5       | 8.99 | 1      |
| 1979 | 85,249.40  | 69,393  | 78,547  | 6,702   | 9.25 | 725    |
| 1983 | 5,480.40   | 4,381   | 4,959   | 521     | 9.16 | 57     |
| 1991 | 1,625.41   | 1,228   | 1,390   | 235     | 9.24 | 25     |
| 1992 | 3,087.69   | 2,310   | 2,615   | 473     | 9.26 | 51     |
| 1998 | 249,117.92 | 174,084 | 197,048 | 52,070  | 9.27 | 5,617  |
| 2000 | 1,971.28   | 1,334   | 1,510   | 461     | 9.32 | 49     |
| 2007 | 8,637.28   | 4,945   | 5,597   | 3,040   | 9.33 | 326    |
| 2009 | 8,908.99   | 4,715   | 5,337   | 3,572   | 9.34 | 382    |
| 2013 | 76,855.87  | 31,572  | 35,737  | 41,119  | 9.32 | 4,412  |
| 2014 | 4,037.54   | 1,499   | 1,697   | 2,341   | 9.32 | 251    |
| 2015 | 4,344.34   | 1,417   | 1,604   | 2,740   | 9.29 | 295    |
| 2016 | 18,864.29  | 5,163   | 5,844   | 13,020  | 9.29 | 1,402  |
|      | 469,720.42 | 303,394 | 343,416 | 126,304 |      | 13,593 |

JEANNETTE SERVICE CENTER AND SHOP  
INTERIM SURVIVOR CURVE.. IOWA 90-R1.5  
PROBABLE RETIREMENT YEAR.. 6-2056  
NET SALVAGE PERCENT.. 0

|      |            |         |         |         |       |       |
|------|------------|---------|---------|---------|-------|-------|
| 1981 | 556,863.03 | 308,725 | 349,450 | 207,413 | 30.94 | 6,704 |
| 1986 | 13,867.13  | 7,154   | 8,098   | 5,769   | 31.44 | 183   |
| 1987 | 10,234.21  | 5,189   | 5,874   | 4,361   | 31.60 | 138   |

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, 2019

| YEAR<br>(1)                           | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|---------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| JEANNETTE SERVICE CENTER AND SHOP     |                         |                              |                               |                                |                     |                          |
| INTERIM SURVIVOR CURVE.. IOWA 90-R1.5 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 6-2056     |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0               |                         |                              |                               |                                |                     |                          |
| 1988                                  | 9,772.24                | 4,864                        | 5,506                         | 4,267                          | 31.79               | 134                      |
| 1996                                  | 15,508.61               | 6,560                        | 7,425                         | 8,083                          | 32.06               | 252                      |
| 1997                                  | 7,742.34                | 3,188                        | 3,609                         | 4,134                          | 32.14               | 129                      |
| 1998                                  | 1,269.03                | 507                          | 574                           | 695                            | 32.26               | 22                       |
| 2000                                  | 2,007.69                | 756                          | 856                           | 1,152                          | 32.31               | 36                       |
| 2003                                  | 23,595.83               | 7,980                        | 9,033                         | 14,563                         | 32.28               | 451                      |
| 2006                                  | 120,796.16              | 35,707                       | 40,417                        | 80,379                         | 32.16               | 2,499                    |
| 2007                                  | 82,625.24               | 23,135                       | 26,187                        | 56,438                         | 32.14               | 1,756                    |
| 2009                                  | 22,982.47               | 5,647                        | 6,392                         | 16,591                         | 32.24               | 515                      |
| 2010                                  | 4,230.68                | 965                          | 1,092                         | 3,138                          | 32.17               | 98                       |
| 2013                                  | 778,943.31              | 132,109                      | 149,536                       | 629,407                        | 31.82               | 19,780                   |
| 2015                                  | 1,031,112.93            | 128,992                      | 146,008                       | 885,105                        | 31.47               | 28,125                   |
| 2016                                  | 79,041.77               | 7,967                        | 9,018                         | 70,024                         | 31.22               | 2,243                    |
| 2018                                  | 495,470.50              | 23,485                       | 26,583                        | 468,887                        | 30.15               | 15,552                   |
| 2019                                  | 288,644.00              | 5,022                        | 5,684                         | 282,960                        | 28.24               | 10,020                   |
|                                       | 3,544,707.17            | 707,952                      | 801,341                       | 2,743,366                      |                     | 88,637                   |

OTHER BUILDINGS  
SURVIVOR CURVE.. IOWA 35-R2  
NET SALVAGE PERCENT.. 0

|      |           |        |        |       |      |     |
|------|-----------|--------|--------|-------|------|-----|
| 1948 | 25.51     | 26     | 26     |       |      |     |
| 1950 | 21.90     | 22     | 22     |       |      |     |
| 1951 | 43.17     | 43     | 43     |       |      |     |
| 1953 | 1,464.24  | 1,464  | 1,464  |       |      |     |
| 1954 | 1,364.22  | 1,364  | 1,364  |       |      |     |
| 1955 | 4,473.00  | 4,454  | 4,473  |       |      |     |
| 1956 | 194.92    | 193    | 195    |       |      |     |
| 1961 | 4,433.75  | 4,216  | 4,434  |       |      |     |
| 1966 | 1,724.88  | 1,570  | 1,725  |       |      |     |
| 1969 | 1,064.36  | 942    | 1,064  |       |      |     |
| 1971 | 92,002.07 | 79,858 | 90,528 | 1,474 | 4.62 | 319 |
| 1972 | 8,131.83  | 6,986  | 7,919  | 212   | 4.93 | 43  |
| 1975 | 5,184.65  | 4,314  | 4,890  | 294   | 5.88 | 50  |
| 1976 | 6,052.34  | 5,344  | 6,052  |       |      |     |
| 1984 | 40,545.97 | 32,672 | 37,038 | 3,508 | 8.56 | 410 |
| 1985 | 3,083.66  | 2,447  | 2,774  | 310   | 8.98 | 35  |
| 1987 | 13,708.74 | 10,515 | 11,920 | 1,789 | 9.87 | 181 |

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, 2019

| YEAR<br>(1)                 | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| OTHER BUILDINGS             |                         |                              |                               |                                |                     |                          |
| SURVIVOR CURVE.. IOWA 35-R2 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1988                        | 14,237.99               | 10,718                       | 12,150                        | 2,088                          | 10.34               | 202                      |
| 1989                        | 11,008.87               | 8,126                        | 9,212                         | 1,797                          | 10.82               | 166                      |
| 1990                        | 31,032.37               | 22,520                       | 25,529                        | 5,503                          | 11.15               | 494                      |
| 1993                        | 7,863.23                | 5,314                        | 6,024                         | 1,839                          | 12.71               | 145                      |
| 1994                        | 14,712.37               | 9,716                        | 11,014                        | 3,698                          | 13.11               | 282                      |
| 1995                        | 27,111.66               | 17,403                       | 19,728                        | 7,383                          | 13.67               | 540                      |
| 1996                        | 2,332.50                | 1,453                        | 1,647                         | 685                            | 14.23               | 48                       |
| 1997                        | 1,306.40                | 791                          | 897                           | 410                            | 14.68               | 28                       |
| 1998                        | 55,647.79               | 32,543                       | 36,891                        | 18,756                         | 15.26               | 1,229                    |
| 1999                        | 23,188.65               | 13,074                       | 14,821                        | 8,368                          | 15.86               | 528                      |
| 2000                        | 183,628.80              | 99,894                       | 113,242                       | 70,387                         | 16.34               | 4,308                    |
| 2001                        | 8,892.76                | 4,639                        | 5,259                         | 3,634                          | 16.96               | 214                      |
| 2003                        | 12,343.29               | 5,906                        | 6,695                         | 5,648                          | 17.98               | 314                      |
| 2006                        | 1,731.93                | 704                          | 798                           | 934                            | 19.72               | 47                       |
| 2007                        | 26,025.23               | 9,921                        | 11,247                        | 14,779                         | 20.29               | 728                      |
| 2008                        | 131,043.48              | 46,717                       | 52,959                        | 78,084                         | 20.76               | 3,761                    |
| 2009                        | 184,701.25              | 60,896                       | 69,033                        | 115,668                        | 21.35               | 5,418                    |
| 2010                        | 11,634.20               | 3,525                        | 3,996                         | 7,638                          | 21.85               | 350                      |
| 2011                        | 8,270.31                | 2,271                        | 2,574                         | 5,696                          | 22.46               | 254                      |
| 2012                        | 10,067.48               | 2,485                        | 2,817                         | 7,250                          | 22.89               | 317                      |
| 2013                        | 561,502.25              | 121,902                      | 138,190                       | 423,312                        | 23.44               | 18,059                   |
| 2014                        | 304,748.44              | 57,171                       | 64,810                        | 239,938                        | 23.82               | 10,073                   |
| 2015                        | 163,569.82              | 25,615                       | 29,038                        | 134,532                        | 24.24               | 5,550                    |
| 2016                        | 326,985.79              | 40,742                       | 46,186                        | 280,800                        | 24.59               | 11,419                   |
| 2017                        | 169,192.16              | 15,786                       | 17,895                        | 151,297                        | 24.71               | 6,123                    |
| 2018                        | 660,682.01              | 37,923                       | 42,990                        | 617,692                        | 24.61               | 25,099                   |
| 2019                        | 384,949.00              | 8,084                        | 9,164                         | 375,785                        | 23.31               | 16,121                   |
|                             | 3,521,929.24            | 822,269                      | 930,739                       | 2,591,190                      |                     | 112,855                  |
|                             | 9,712,307.79            | 2,787,888                    | 3,144,496                     | 6,567,811                      |                     | 313,877                  |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 20.9 3.23

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, 2019

| YEAR<br>(1)                                                  | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|--------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 45-R3                                  |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                      |                         |                              |                               |                                |                     |                          |
| 2001                                                         | 16,515.17               | 7,118                        | 7,601                         | 8,914                          | 24.42               | 365                      |
|                                                              | 16,515.17               | 7,118                        | 7,601                         | 8,914                          |                     | 365                      |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. |                         |                              |                               |                                |                     | 24.4 2.21                |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.1 MAINS - CAST IRON

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>(1)                         | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| INTERIM SURVIVOR CURVE.. IOWA 71-R1 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 12-2025  |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0             |                         |                              |                               |                                |                     |                          |
| 1921                                | 4,546.84                | 4,202                        | 3,954                         | 593                            | 5.23                | 113                      |
| 1922                                | 152.35                  | 141                          | 133                           | 19                             | 5.25                | 4                        |
| 1923                                | 1,004.64                | 927                          | 872                           | 133                            | 5.28                | 25                       |
| 1924                                | 13,653.73               | 12,594                       | 11,849                        | 1,805                          | 5.30                | 341                      |
| 1925                                | 8,152.66                | 7,516                        | 7,072                         | 1,081                          | 5.32                | 203                      |
| 1926                                | 30,123.65               | 27,754                       | 26,113                        | 4,011                          | 5.34                | 751                      |
| 1927                                | 12,260.57               | 11,291                       | 10,623                        | 1,638                          | 5.35                | 306                      |
| 1928                                | 15,270.45               | 14,054                       | 13,223                        | 2,047                          | 5.37                | 381                      |
| 1929                                | 25,910.53               | 23,832                       | 22,423                        | 3,488                          | 5.39                | 647                      |
| 1930                                | 9,823.17                | 9,029                        | 8,495                         | 1,328                          | 5.41                | 245                      |
| 1931                                | 7,597.77                | 6,980                        | 6,567                         | 1,031                          | 5.42                | 190                      |
| 1932                                | 0.18                    |                              |                               |                                |                     |                          |
| 1933                                | 1,455.03                | 1,335                        | 1,256                         | 199                            | 5.45                | 37                       |
| 1934                                | 434.42                  | 398                          | 374                           | 60                             | 5.47                | 11                       |
| 1937                                | 67.66                   | 62                           | 58                            | 10                             | 5.51                | 2                        |
| 1938                                | 2,721.84                | 2,489                        | 2,342                         | 380                            | 5.52                | 69                       |
| 1939                                | 116,649.03              | 106,569                      | 100,268                       | 16,381                         | 5.54                | 2,957                    |
| 1940                                | 2,907.19                | 2,654                        | 2,497                         | 410                            | 5.55                | 74                       |
| 1941                                | 6,465.60                | 5,898                        | 5,549                         | 917                            | 5.56                | 165                      |
| 1942                                | 487.77                  | 445                          | 419                           | 69                             | 5.57                | 12                       |
| 1943                                | 1,689.33                | 1,539                        | 1,448                         | 241                            | 5.58                | 43                       |
| 1944                                | 2,192.48                | 1,995                        | 1,877                         | 315                            | 5.59                | 56                       |
| 1945                                | 1,609.30                | 1,463                        | 1,376                         | 233                            | 5.60                | 42                       |
| 1946                                | 1,192.08                | 1,083                        | 1,019                         | 173                            | 5.61                | 31                       |
| 1947                                | 535.21                  | 486                          | 457                           | 78                             | 5.63                | 14                       |
| 1948                                | 7,684.76                | 6,969                        | 6,557                         | 1,128                          | 5.63                | 200                      |
| 1949                                | 27.46                   | 25                           | 24                            | 3                              | 5.64                | 1                        |
| 1951                                | 20.62                   | 19                           | 18                            | 3                              | 5.66                | 1                        |
| 1982                                | 326.88                  | 283                          | 266                           | 61                             | 5.79                | 11                       |
|                                     | 274,963.20              | 252,032                      | 237,129                       | 37,834                         |                     | 6,932                    |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.5 2.52

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.3 MAINS - BARE STEEL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>(1)                         | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| INTERIM SURVIVOR CURVE.. IOWA 71-R1 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 12-2030  |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0             |                         |                              |                               |                                |                     |                          |
| 1948                                | 58,061.75               | 49,006                       | 55,105                        | 2,957                          | 9.76                | 303                      |
| 1949                                | 248,661.98              | 209,505                      | 235,578                       | 13,084                         | 9.79                | 1,336                    |
| 1950                                | 565,112.27              | 475,242                      | 534,386                       | 30,726                         | 9.82                | 3,129                    |
| 1951                                | 514,070.48              | 431,495                      | 485,195                       | 28,875                         | 9.85                | 2,931                    |
| 1952                                | 1,188,660.84            | 995,753                      | 1,119,675                     | 68,986                         | 9.88                | 6,982                    |
| 1953                                | 882,132.04              | 737,445                      | 829,220                       | 52,912                         | 9.91                | 5,339                    |
| 1954                                | 1,138,235.09            | 949,538                      | 1,067,708                     | 70,527                         | 9.94                | 7,095                    |
| 1955                                | 2,893,642.10            | 2,408,610                    | 2,708,362                     | 185,280                        | 9.97                | 18,584                   |
| 1956                                | 1,737,851.46            | 1,443,546                    | 1,623,196                     | 114,655                        | 9.99                | 11,477                   |
| 1957                                | 2,340,427.12            | 1,939,559                    | 2,180,938                     | 159,489                        | 10.02               | 15,917                   |
| 1958                                | 2,787,429.57            | 2,304,842                    | 2,591,680                     | 195,750                        | 10.04               | 19,497                   |
| 1959                                | 2,284,259.75            | 1,884,012                    | 2,118,478                     | 165,782                        | 10.07               | 16,463                   |
| 1960                                | 2,503,540.28            | 2,059,913                    | 2,316,270                     | 187,270                        | 10.09               | 18,560                   |
| 1961                                | 2,802,046.03            | 2,299,275                    | 2,585,421                     | 216,625                        | 10.12               | 21,406                   |
| 1962                                | 2,409,071.96            | 1,971,681                    | 2,217,057                     | 192,015                        | 10.14               | 18,936                   |
| 1963                                | 3,199,665.03            | 2,611,695                    | 2,936,721                     | 262,944                        | 10.16               | 25,880                   |
| 1964                                | 3,113,331.16            | 2,534,127                    | 2,849,500                     | 263,831                        | 10.18               | 25,917                   |
| 1965                                | 2,514,162.61            | 2,040,494                    | 2,294,434                     | 219,729                        | 10.20               | 21,542                   |
| 1966                                | 3,660,164.19            | 2,960,926                    | 3,329,414                     | 330,750                        | 10.23               | 32,331                   |
| 1967                                | 3,480,822.25            | 2,807,005                    | 3,156,338                     | 324,484                        | 10.25               | 31,657                   |
| 1968                                | 2,629,041.15            | 2,113,171                    | 2,376,156                     | 252,885                        | 10.27               | 24,624                   |
| 1969                                | 2,076,136.74            | 1,663,567                    | 1,870,599                     | 205,538                        | 10.28               | 19,994                   |
| 1970                                | 959,844.16              | 766,368                      | 861,743                       | 98,101                         | 10.30               | 9,524                    |
| 1971                                | 2,324,873.62            | 1,849,390                    | 2,079,547                     | 245,327                        | 10.32               | 23,772                   |
| 1972                                | 842,228.93              | 667,391                      | 750,448                       | 91,781                         | 10.34               | 8,876                    |
| 1973                                | 553,897.32              | 437,169                      | 491,575                       | 62,322                         | 10.36               | 6,016                    |
| 1974                                | 1,219.76                | 959                          | 1,078                         | 142                            | 10.37               | 14                       |
| 1975                                | 739.63                  | 579                          | 651                           | 89                             | 10.39               | 9                        |
| 1976                                | 236.85                  | 192                          | 216                           | 21                             | 10.26               | 2                        |
| 1977                                | 1,960.60                | 1,575                        | 1,771                         | 190                            | 10.41               | 18                       |
| 1978                                | 161,794.24              | 129,597                      | 145,725                       | 16,069                         | 10.31               | 1,559                    |
| 1979                                | 16,949.37               | 13,522                       | 15,205                        | 1,744                          | 10.26               | 170                      |
| 1980                                | 196,534.74              | 156,049                      | 175,470                       | 21,065                         | 10.25               | 2,055                    |
| 1981                                | 56.00                   | 44                           | 49                            | 7                              | 10.28               | 1                        |
| 1983                                | 7,313.73                | 5,686                        | 6,394                         | 920                            | 10.45               | 88                       |
| 1984                                | 195.84                  | 152                          | 171                           | 25                             | 10.37               | 2                        |
| 1985                                | 34.16                   | 26                           | 29                            | 5                              | 10.34               |                          |
| 1986                                | 79.43                   | 61                           | 69                            | 10                             | 10.36               | 1                        |
| 1988                                | 0.10                    |                              |                               |                                |                     |                          |
| 1989                                | 869.86                  | 647                          | 728                           | 142                            | 10.48               | 14                       |
| 1990                                | 11,391.32               | 8,401                        | 9,446                         | 1,945                          | 10.50               | 185                      |
| 1992                                | 44,064.14               | 31,867                       | 35,833                        | 8,231                          | 10.52               | 782                      |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.3 MAINS - BARE STEEL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>(1)                                                       | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| INTERIM SURVIVOR CURVE.. IOWA 71-R1                               |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 12-2030                                |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                           |                         |                              |                               |                                |                     |                          |
| 1997                                                              | 3,936.97                | 2,684                        | 3,018                         | 919                            | 10.50               | 88                       |
| 1998                                                              | 651.20                  | 437                          | 491                           | 160                            | 10.55               | 15                       |
| 2008                                                              | 76.93                   | 40                           | 45                            | 32                             | 10.57               | 3                        |
| 2011                                                              | 32,037.21               | 14,295                       | 16,074                        | 15,963                         | 10.55               | 1,513                    |
|                                                                   | 50,187,511.96           | 40,977,538                   | 46,077,207                    | 4,110,305                      |                     | 404,607                  |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 10.2 |                         |                              |                               |                                |                     | 0.81                     |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.45 MAINS - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>(1)                 | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 71-R1 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1952                        | 99,605.28               | 60,591                       | 48,762                        | 50,843                         | 27.81               | 1,828                    |
| 1954                        | 25,839.58               | 15,351                       | 12,354                        | 13,486                         | 28.82               | 468                      |
| 1955                        | 96,291.60               | 56,500                       | 45,470                        | 50,822                         | 29.34               | 1,732                    |
| 1956                        | 88,214.60               | 51,115                       | 41,136                        | 47,079                         | 29.86               | 1,577                    |
| 1957                        | 83,670.60               | 47,869                       | 38,524                        | 45,147                         | 30.38               | 1,486                    |
| 1958                        | 77,413.45               | 43,712                       | 35,178                        | 42,235                         | 30.91               | 1,366                    |
| 1959                        | 85,943.23               | 47,874                       | 38,528                        | 47,415                         | 31.45               | 1,508                    |
| 1960                        | 58,675.14               | 32,238                       | 25,944                        | 32,731                         | 31.99               | 1,023                    |
| 1961                        | 25,461.35               | 13,796                       | 11,103                        | 14,358                         | 32.53               | 441                      |
| 1962                        | 75,807.98               | 40,488                       | 32,584                        | 43,224                         | 33.08               | 1,307                    |
| 1963                        | 98,042.90               | 51,604                       | 41,530                        | 56,513                         | 33.63               | 1,680                    |
| 1964                        | 158,098.34              | 81,966                       | 65,964                        | 92,134                         | 34.19               | 2,695                    |
| 1965                        | 77,161.59               | 39,385                       | 31,696                        | 45,466                         | 34.76               | 1,308                    |
| 1966                        | 109,743.01              | 55,134                       | 44,371                        | 65,372                         | 35.33               | 1,850                    |
| 1967                        | 69,269.63               | 34,245                       | 27,560                        | 41,710                         | 35.90               | 1,162                    |
| 1968                        | 299,145.31              | 145,444                      | 117,050                       | 182,095                        | 36.48               | 4,992                    |
| 1969                        | 638,378.60              | 305,164                      | 245,589                       | 392,790                        | 37.06               | 10,599                   |
| 1970                        | 670,341.82              | 314,873                      | 253,403                       | 416,939                        | 37.65               | 11,074                   |
| 1971                        | 1,349,839.50            | 622,829                      | 501,239                       | 848,600                        | 38.24               | 22,191                   |
| 1972                        | 1,057,820.87            | 479,151                      | 385,610                       | 672,211                        | 38.84               | 17,307                   |
| 1973                        | 2,421,869.58            | 1,076,545                    | 866,380                       | 1,555,490                      | 39.44               | 39,439                   |
| 1974                        | 2,776,886.19            | 1,210,500                    | 974,184                       | 1,802,702                      | 40.05               | 45,011                   |
| 1975                        | 2,725,756.24            | 1,164,770                    | 937,381                       | 1,788,375                      | 40.66               | 43,984                   |
| 1976                        | 2,530,779.34            | 1,409,138                    | 1,134,043                     | 1,396,736                      | 34.62               | 40,345                   |
| 1977                        | 4,921,922.21            | 2,698,198                    | 2,171,451                     | 2,750,471                      | 35.02               | 78,540                   |
| 1978                        | 4,932,084.21            | 2,660,859                    | 2,141,401                     | 2,790,683                      | 35.42               | 78,788                   |
| 1979                        | 6,011,181.93            | 3,189,533                    | 2,566,866                     | 3,444,316                      | 35.83               | 96,129                   |
| 1980                        | 7,512,178.96            | 3,916,850                    | 3,152,195                     | 4,359,984                      | 36.26               | 120,242                  |
| 1981                        | 8,524,340.86            | 4,364,463                    | 3,512,424                     | 5,011,917                      | 36.69               | 136,602                  |
| 1982                        | 8,675,896.76            | 4,359,638                    | 3,508,541                     | 5,167,356                      | 37.13               | 139,169                  |
| 1983                        | 6,992,547.91            | 3,445,928                    | 2,773,207                     | 4,219,341                      | 37.57               | 112,306                  |
| 1984                        | 8,093,690.92            | 3,907,634                    | 3,144,778                     | 4,948,913                      | 38.03               | 130,132                  |
| 1985                        | 7,393,164.01            | 3,494,009                    | 2,811,902                     | 4,581,262                      | 38.50               | 118,994                  |
| 1986                        | 8,400,399.81            | 3,883,505                    | 3,125,360                     | 5,275,040                      | 38.96               | 135,396                  |
| 1987                        | 8,094,391.11            | 3,682,948                    | 2,963,956                     | 5,130,435                      | 38.93               | 131,786                  |
| 1988                        | 9,342,534.96            | 4,149,954                    | 3,339,792                     | 6,002,743                      | 39.42               | 152,277                  |
| 1989                        | 8,438,674.76            | 3,654,790                    | 2,941,295                     | 5,497,380                      | 39.92               | 137,710                  |
| 1990                        | 6,887,187.33            | 2,905,016                    | 2,337,893                     | 4,549,294                      | 40.43               | 112,523                  |
| 1991                        | 6,972,221.91            | 2,880,922                    | 2,318,503                     | 4,653,719                      | 40.47               | 114,992                  |
| 1992                        | 7,897,780.60            | 3,170,959                    | 2,551,918                     | 5,345,863                      | 40.99               | 130,419                  |
| 1993                        | 8,560,337.90            | 3,335,108                    | 2,684,022                     | 5,876,316                      | 41.52               | 141,530                  |
| 1994                        | 10,529,777.38           | 4,001,315                    | 3,220,171                     | 7,309,606                      | 41.61               | 175,669                  |
| 1995                        | 10,563,810.05           | 3,882,200                    | 3,124,310                     | 7,439,500                      | 42.17               | 176,417                  |



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.45 MAINS - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>(1)                                                  | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|--------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 71-R1                                  |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                      |                         |                              |                               |                                |                     |                          |
| 1996                                                         | 10,344,475.99           | 3,695,047                    | 2,973,693                     | 7,370,783                      | 42.29               | 174,291                  |
| 1997                                                         | 13,023,697.47           | 4,512,711                    | 3,631,731                     | 9,391,966                      | 42.44               | 221,300                  |
| 1998                                                         | 11,064,447.86           | 3,686,674                    | 2,966,955                     | 8,097,493                      | 43.02               | 188,226                  |
| 1999                                                         | 10,301,557.24           | 3,315,041                    | 2,667,872                     | 7,633,685                      | 43.20               | 176,706                  |
| 2000                                                         | 9,686,628.71            | 3,002,855                    | 2,416,632                     | 7,269,997                      | 43.40               | 167,511                  |
| 2001                                                         | 11,482,415.73           | 3,419,463                    | 2,751,909                     | 8,730,507                      | 43.61               | 200,195                  |
| 2002                                                         | 7,436,860.13            | 2,120,993                    | 1,706,929                     | 5,729,931                      | 43.85               | 130,671                  |
| 2003                                                         | 11,070,663.70           | 3,013,435                    | 2,425,146                     | 8,645,518                      | 44.11               | 195,999                  |
| 2004                                                         | 17,089,068.34           | 4,449,993                    | 3,581,257                     | 13,507,811                     | 44.02               | 306,856                  |
| 2005                                                         | 23,424,537.54           | 5,774,149                    | 4,646,909                     | 18,777,629                     | 44.32               | 423,683                  |
| 2006                                                         | 12,883,346.46           | 3,009,550                    | 2,422,020                     | 10,461,326                     | 44.30               | 236,147                  |
| 2007                                                         | 37,387,169.03           | 8,225,177                    | 6,619,442                     | 30,767,727                     | 44.32               | 694,218                  |
| 2008                                                         | 56,987,342.33           | 11,727,995                   | 9,438,434                     | 47,548,908                     | 44.37               | 1,071,645                |
| 2009                                                         | 35,212,483.67           | 6,729,106                    | 5,415,437                     | 29,797,047                     | 44.45               | 670,350                  |
| 2010                                                         | 46,353,405.18           | 8,190,647                    | 6,591,653                     | 39,761,752                     | 44.26               | 898,368                  |
| 2011                                                         | 84,129,619.87           | 13,586,934                   | 10,934,467                    | 73,195,153                     | 44.13               | 1,658,626                |
| 2012                                                         | 92,947,732.41           | 13,523,895                   | 10,883,735                    | 82,063,997                     | 44.05               | 1,862,974                |
| 2013                                                         | 120,012,931.83          | 15,601,681                   | 12,555,891                    | 107,457,041                    | 43.50               | 2,470,277                |
| 2014                                                         | 125,416,985.76          | 14,209,744                   | 11,435,691                    | 113,981,295                    | 43.04               | 2,648,264                |
| 2015                                                         | 122,952,021.53          | 11,778,804                   | 9,479,323                     | 113,472,699                    | 42.45               | 2,673,091                |
| 2016                                                         | 168,929,536.25          | 13,125,825                   | 10,563,377                    | 158,366,159                    | 41.55               | 3,811,460                |
| 2017                                                         | 179,558,733.29          | 10,683,745                   | 8,598,044                     | 170,960,689                    | 40.19               | 4,253,812                |
| 2018                                                         | 177,104,838.23          | 6,747,694                    | 5,430,396                     | 171,674,442                    | 37.87               | 4,533,257                |
| 2019                                                         | 205,738,343.00          | 3,106,649                    | 2,500,163                     | 203,238,180                    | 32.61               | 6,232,388                |
|                                                              | 1,754,983,020.86        | 252,221,918                  | 202,982,674                   | 1,552,000,347                  |                     | 38,576,309               |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. |                         |                              |                               |                                |                     | 40.2 2.20                |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>(1)                 | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 45-01 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1960                        | 116,287.25              | 76,879                       | 65,062                        | 51,225                         | 15.25               | 3,359                    |
| 1961                        | 79,287.30               | 51,537                       | 43,615                        | 35,672                         | 15.75               | 2,265                    |
| 1962                        | 117,833.18              | 75,282                       | 63,710                        | 54,123                         | 16.25               | 3,331                    |
| 1963                        | 122,216.87              | 76,725                       | 64,932                        | 57,285                         | 16.75               | 3,420                    |
| 1964                        | 74,646.49               | 46,032                       | 38,956                        | 35,690                         | 17.25               | 2,069                    |
| 1965                        | 68,867.46               | 41,703                       | 35,293                        | 33,574                         | 17.75               | 1,891                    |
| 1966                        | 104,977.06              | 62,403                       | 52,811                        | 52,166                         | 18.25               | 2,858                    |
| 1967                        | 50,470.16               | 29,441                       | 24,916                        | 25,554                         | 18.75               | 1,363                    |
| 1968                        | 54,421.96               | 31,141                       | 26,354                        | 28,068                         | 19.25               | 1,458                    |
| 1969                        | 69,064.89               | 38,753                       | 32,796                        | 36,269                         | 19.75               | 1,836                    |
| 1970                        | 38,814.80               | 21,348                       | 18,067                        | 20,748                         | 20.25               | 1,025                    |
| 1971                        | 159,409.57              | 85,904                       | 72,700                        | 86,710                         | 20.75               | 4,179                    |
| 1972                        | 124,791.49              | 65,862                       | 55,738                        | 69,053                         | 21.25               | 3,250                    |
| 1973                        | 132,144.16              | 68,275                       | 57,780                        | 74,364                         | 21.75               | 3,419                    |
| 1974                        | 109,025.11              | 55,119                       | 46,647                        | 62,378                         | 22.25               | 2,804                    |
| 1975                        | 101,118.03              | 49,997                       | 42,312                        | 58,806                         | 22.75               | 2,585                    |
| 1976                        | 85,273.44               | 57,867                       | 48,972                        | 36,301                         | 20.60               | 1,762                    |
| 1977                        | 67,232.10               | 45,146                       | 38,207                        | 29,025                         | 20.79               | 1,396                    |
| 1978                        | 63,465.53               | 42,141                       | 35,663                        | 27,803                         | 21.00               | 1,324                    |
| 1979                        | 79,084.04               | 51,563                       | 43,637                        | 35,447                         | 21.61               | 1,640                    |
| 1980                        | 123,827.78              | 79,720                       | 67,466                        | 56,362                         | 21.85               | 2,579                    |
| 1981                        | 168,937.89              | 107,309                      | 90,815                        | 78,123                         | 22.11               | 3,533                    |
| 1982                        | 455,771.80              | 285,404                      | 241,534                       | 214,238                        | 22.38               | 9,573                    |
| 1983                        | 175,714.38              | 108,381                      | 91,722                        | 83,992                         | 22.67               | 3,705                    |
| 1984                        | 159,472.14              | 96,800                       | 81,921                        | 77,551                         | 22.98               | 3,375                    |
| 1985                        | 232,913.09              | 139,003                      | 117,637                       | 115,276                        | 23.31               | 4,945                    |
| 1986                        | 211,667.60              | 124,080                      | 105,008                       | 106,660                        | 23.65               | 4,510                    |
| 1987                        | 192,807.92              | 110,903                      | 93,856                        | 98,952                         | 24.00               | 4,123                    |
| 1988                        | 354,038.99              | 199,607                      | 168,925                       | 185,114                        | 24.37               | 7,596                    |
| 1989                        | 382,179.66              | 212,148                      | 179,539                       | 202,641                        | 24.45               | 8,288                    |
| 1990                        | 282,158.86              | 153,156                      | 129,614                       | 152,545                        | 24.85               | 6,139                    |
| 1991                        | 230,911.25              | 123,076                      | 104,158                       | 126,753                        | 24.97               | 5,076                    |
| 1992                        | 128,466.35              | 67,124                       | 56,806                        | 71,660                         | 25.13               | 2,852                    |
| 1993                        | 213,819.40              | 109,347                      | 92,539                        | 121,280                        | 25.32               | 4,790                    |
| 1994                        | 355,178.55              | 177,518                      | 150,232                       | 204,947                        | 25.52               | 8,031                    |
| 1995                        | 217,987.87              | 106,291                      | 89,953                        | 128,035                        | 25.75               | 4,972                    |
| 1996                        | 436,097.76              | 207,016                      | 175,196                       | 260,902                        | 26.00               | 10,035                   |
| 1997                        | 455,462.91              | 210,059                      | 177,771                       | 277,692                        | 26.28               | 10,567                   |
| 1998                        | 351,206.06              | 157,832                      | 133,572                       | 217,634                        | 26.34               | 8,262                    |
| 1999                        | 700,709.49              | 305,930                      | 258,905                       | 441,804                        | 26.45               | 16,703                   |
| 2000                        | 1,099,592.70            | 465,348                      | 393,819                       | 705,774                        | 26.58               | 26,553                   |
| 2001                        | 315,599.27              | 129,017                      | 109,186                       | 206,413                        | 26.75               | 7,716                    |
| 2002                        | 352,694.74              | 139,491                      | 118,050                       | 234,645                        | 26.75               | 8,772                    |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>(1)                                                  | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|--------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE... IOWA 45-01                                 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT... 0                                     |                         |                              |                               |                                |                     |                          |
| 2003                                                         | 596,445.03              | 227,365                      | 192,417                       | 404,028                        | 26.79               | 15,081                   |
| 2004                                                         | 504,023.83              | 184,372                      | 156,032                       | 347,992                        | 26.87               | 12,951                   |
| 2005                                                         | 524,456.35              | 184,032                      | 155,744                       | 368,712                        | 26.82               | 13,748                   |
| 2006                                                         | 1,209,028.02            | 404,783                      | 342,564                       | 866,464                        | 26.82               | 32,307                   |
| 2007                                                         | 575,048.16              | 183,325                      | 155,146                       | 419,902                        | 26.71               | 15,721                   |
| 2008                                                         | 1,812,349.04            | 546,061                      | 462,126                       | 1,350,223                      | 26.67               | 50,627                   |
| 2009                                                         | 1,285,883.92            | 364,548                      | 308,513                       | 977,371                        | 26.54               | 36,826                   |
| 2010                                                         | 1,461,408.50            | 387,273                      | 327,745                       | 1,133,664                      | 26.34               | 43,040                   |
| 2011                                                         | 2,140,970.79            | 527,749                      | 446,629                       | 1,694,342                      | 25.98               | 65,217                   |
| 2012                                                         | 1,609,142.25            | 363,344                      | 307,494                       | 1,301,648                      | 25.72               | 50,608                   |
| 2013                                                         | 3,195,069.36            | 654,350                      | 553,770                       | 2,641,299                      | 25.24               | 104,647                  |
| 2014                                                         | 11,181,879.45           | 2,035,102                    | 1,722,286                     | 9,459,593                      | 24.71               | 382,824                  |
| 2015                                                         | 176,329.00              | 27,860                       | 23,578                        | 152,751                        | 23.99               | 6,367                    |
| 2016                                                         | 8,802,580.01            | 1,158,420                    | 980,359                       | 7,822,221                      | 23.10               | 338,624                  |
| 2017                                                         | 13,390,014.60           | 1,392,562                    | 1,178,510                     | 12,211,505                     | 21.91               | 557,348                  |
| 2018                                                         | 26,965,093.10           | 1,887,557                    | 1,597,420                     | 25,367,673                     | 19.91               | 1,274,117                |
| 2019                                                         | 6,446,573.00            | 196,620                      | 166,397                       | 6,280,176                      | 15.89               | 395,228                  |
|                                                              | 91,291,941.76           | 15,613,001                   | 13,213,122                    | 78,078,820                     |                     | 3,615,210                |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. |                         |                              |                               |                                |                     | 21.6 3.96                |

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, 2019

| YEAR<br>(1)                                                            | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|------------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 35-S2                                            |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                                |                         |                              |                               |                                |                     |                          |
| 1976                                                                   | 591.42                  | 525                          | 525                           | 66                             | 5.52                | 12                       |
| 1983                                                                   | 32,512.26               | 26,940                       | 26,949                        | 5,563                          | 7.55                | 737                      |
| 1984                                                                   | 1,528.08                | 1,253                        | 1,253                         | 275                            | 7.79                | 35                       |
| 1987                                                                   | 7,476.62                | 5,880                        | 5,882                         | 1,595                          | 8.82                | 181                      |
| 1988                                                                   | 15,907.49               | 12,277                       | 12,281                        | 3,626                          | 9.31                | 389                      |
| 1989                                                                   | 34,134.70               | 25,922                       | 25,932                        | 8,203                          | 9.66                | 849                      |
| 1996                                                                   | 48,076.94               | 31,298                       | 31,309                        | 16,768                         | 12.60               | 1,331                    |
|                                                                        | 140,227.51              | 104,095                      | 104,131                       | 36,097                         |                     | 3,534                    |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 10.2 2.52 |                         |                              |                               |                                |                     |                          |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 380.3 SERVICES - BARE STEEL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>(1)                           | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|---------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| INTERIM SURVIVOR CURVE.. IOWA 50-R0.5 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 12-2030    |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0               |                         |                              |                               |                                |                     |                          |
| 1942                                  | 4,857.70                | 4,113                        | 4,067                         | 791                            | 7.61                | 104                      |
| 1943                                  | 3,859.68                | 3,258                        | 3,222                         | 638                            | 7.72                | 83                       |
| 1944                                  | 3,440.04                | 2,895                        | 2,863                         | 577                            | 7.83                | 74                       |
| 1945                                  | 4,236.28                | 3,556                        | 3,516                         | 720                            | 7.93                | 91                       |
| 1946                                  | 11,185.01               | 9,361                        | 9,257                         | 1,928                          | 8.03                | 240                      |
| 1947                                  | 23,194.12               | 19,362                       | 19,146                        | 4,048                          | 8.12                | 499                      |
| 1948                                  | 31,145.26               | 25,929                       | 25,640                        | 5,505                          | 8.21                | 671                      |
| 1949                                  | 47,460.87               | 39,415                       | 38,976                        | 8,485                          | 8.29                | 1,024                    |
| 1950                                  | 62,901.20               | 52,091                       | 51,510                        | 11,391                         | 8.38                | 1,359                    |
| 1951                                  | 81,371.15               | 67,226                       | 66,476                        | 14,895                         | 8.45                | 1,763                    |
| 1952                                  | 85,988.98               | 70,850                       | 70,060                        | 15,929                         | 8.53                | 1,867                    |
| 1953                                  | 82,281.32               | 67,625                       | 66,871                        | 15,410                         | 8.60                | 1,792                    |
| 1954                                  | 128,946.50              | 105,704                      | 104,526                       | 24,420                         | 8.67                | 2,817                    |
|                                       | 570,868.11              | 471,385                      | 466,130                       | 104,738                        |                     | 12,384                   |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 8.5 2.17

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 380.45 SERVICES - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>(1)                   | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 50-R0.5 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0       |                         |                              |                               |                                |                     |                          |
| 1955                          | 205,868.72              | 143,738                      | 142,136                       | 63,733                         | 15.09               | 4,224                    |
| 1956                          | 264,562.36              | 182,495                      | 180,460                       | 84,102                         | 15.51               | 5,422                    |
| 1957                          | 251,052.33              | 171,067                      | 169,160                       | 81,892                         | 15.93               | 5,141                    |
| 1958                          | 334,323.25              | 224,933                      | 222,425                       | 111,898                        | 16.36               | 6,840                    |
| 1959                          | 430,158.51              | 285,625                      | 282,441                       | 147,718                        | 16.80               | 8,793                    |
| 1960                          | 459,653.50              | 301,257                      | 297,898                       | 161,756                        | 17.23               | 9,388                    |
| 1961                          | 551,375.69              | 356,520                      | 352,545                       | 198,831                        | 17.67               | 11,252                   |
| 1962                          | 550,184.94              | 350,798                      | 346,887                       | 203,298                        | 18.12               | 11,220                   |
| 1963                          | 635,962.44              | 399,766                      | 395,309                       | 240,653                        | 18.57               | 12,959                   |
| 1964                          | 644,127.12              | 399,101                      | 394,652                       | 249,475                        | 19.02               | 13,116                   |
| 1965                          | 639,422.60              | 390,304                      | 385,953                       | 253,470                        | 19.48               | 13,012                   |
| 1966                          | 848,427.74              | 510,075                      | 504,388                       | 344,040                        | 19.94               | 17,254                   |
| 1967                          | 884,440.77              | 523,589                      | 517,752                       | 366,689                        | 20.40               | 17,975                   |
| 1968                          | 958,148.37              | 558,217                      | 551,994                       | 406,154                        | 20.87               | 19,461                   |
| 1969                          | 712,639.48              | 408,342                      | 403,790                       | 308,849                        | 21.35               | 14,466                   |
| 1970                          | 678,248.30              | 382,125                      | 377,865                       | 300,383                        | 21.83               | 13,760                   |
| 1971                          | 611,047.28              | 338,398                      | 334,625                       | 276,422                        | 22.31               | 12,390                   |
| 1972                          | 617,078.90              | 335,691                      | 331,949                       | 285,130                        | 22.80               | 12,506                   |
| 1973                          | 484,588.82              | 258,867                      | 255,981                       | 228,608                        | 23.29               | 9,816                    |
| 1974                          | 125,355.36              | 65,711                       | 64,978                        | 60,377                         | 23.79               | 2,538                    |
| 1975                          | 208,612.33              | 107,227                      | 106,032                       | 102,580                        | 24.30               | 4,221                    |
| 1976                          | 590,589.49              | 395,636                      | 391,225                       | 199,364                        | 21.44               | 9,299                    |
| 1977                          | 2,056,515.96            | 1,354,833                    | 1,339,729                     | 716,787                        | 22.01               | 32,566                   |
| 1978                          | 1,584,441.27            | 1,032,422                    | 1,020,912                     | 563,529                        | 22.19               | 25,396                   |
| 1979                          | 2,031,475.09            | 1,308,270                    | 1,293,685                     | 737,790                        | 22.39               | 32,952                   |
| 1980                          | 2,818,217.06            | 1,781,113                    | 1,761,256                     | 1,056,961                      | 23.00               | 45,955                   |
| 1981                          | 3,096,037.79            | 1,930,999                    | 1,909,471                     | 1,186,567                      | 23.23               | 51,079                   |
| 1982                          | 2,616,253.68            | 1,608,996                    | 1,591,058                     | 1,025,196                      | 23.48               | 43,663                   |
| 1983                          | 2,470,952.44            | 1,488,008                    | 1,471,419                     | 999,533                        | 24.11               | 41,457                   |
| 1984                          | 2,888,842.73            | 1,712,506                    | 1,693,414                     | 1,195,429                      | 24.38               | 49,033                   |
| 1985                          | 3,292,823.01            | 1,919,716                    | 1,898,314                     | 1,394,509                      | 24.67               | 56,527                   |
| 1986                          | 3,739,350.99            | 2,141,900                    | 2,118,021                     | 1,621,330                      | 24.98               | 64,905                   |
| 1987                          | 4,325,357.67            | 2,431,716                    | 2,404,606                     | 1,920,752                      | 25.31               | 75,889                   |
| 1988                          | 5,216,236.05            | 2,875,189                    | 2,843,135                     | 2,373,101                      | 25.65               | 92,519                   |
| 1989                          | 5,022,188.20            | 2,710,977                    | 2,680,754                     | 2,341,434                      | 26.00               | 90,055                   |
| 1990                          | 5,198,197.20            | 2,744,648                    | 2,714,050                     | 2,484,147                      | 26.37               | 94,204                   |
| 1991                          | 4,897,044.78            | 2,525,896                    | 2,497,736                     | 2,399,309                      | 26.75               | 89,694                   |
| 1992                          | 5,600,686.43            | 2,818,265                    | 2,786,846                     | 2,813,840                      | 27.15               | 103,641                  |
| 1993                          | 5,877,120.26            | 2,896,833                    | 2,864,538                     | 3,012,582                      | 27.26               | 110,513                  |
| 1994                          | 6,978,084.37            | 3,345,294                    | 3,307,999                     | 3,670,085                      | 27.69               | 132,542                  |
| 1995                          | 6,465,400.32            | 3,025,807                    | 2,992,074                     | 3,473,326                      | 27.85               | 124,715                  |
| 1996                          | 6,141,258.69            | 2,785,675                    | 2,754,619                     | 3,386,640                      | 28.31               | 119,627                  |
| 1997                          | 6,506,301.94            | 2,869,279                    | 2,837,291                     | 3,669,011                      | 28.52               | 128,647                  |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 380.45 SERVICES - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>(1)                                                  | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|--------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 50-R0.5                                |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                      |                         |                              |                               |                                |                     |                          |
| 1998                                                         | 6,961,171.12            | 2,977,989                    | 2,944,789                     | 4,016,382                      | 28.75               | 139,700                  |
| 1999                                                         | 7,354,545.56            | 3,045,517                    | 3,011,565                     | 4,342,981                      | 29.00               | 149,758                  |
| 2000                                                         | 7,506,161.80            | 3,000,963                    | 2,967,507                     | 4,538,655                      | 29.28               | 155,009                  |
| 2001                                                         | 7,204,190.43            | 2,772,172                    | 2,741,267                     | 4,462,923                      | 29.58               | 150,876                  |
| 2002                                                         | 6,315,242.43            | 2,342,955                    | 2,316,835                     | 3,998,407                      | 29.67               | 134,763                  |
| 2003                                                         | 6,049,012.77            | 2,155,868                    | 2,131,834                     | 3,917,179                      | 29.80               | 131,449                  |
| 2004                                                         | 8,584,480.03            | 2,927,308                    | 2,894,673                     | 5,689,807                      | 29.95               | 189,977                  |
| 2005                                                         | 9,235,336.09            | 2,999,637                    | 2,966,196                     | 6,269,140                      | 30.14               | 208,001                  |
| 2006                                                         | 9,066,036.31            | 2,803,218                    | 2,771,967                     | 6,294,069                      | 30.17               | 208,620                  |
| 2007                                                         | 12,519,591.88           | 3,661,981                    | 3,621,156                     | 8,898,436                      | 30.24               | 294,260                  |
| 2008                                                         | 14,880,887.91           | 4,107,125                    | 4,061,337                     | 10,819,551                     | 30.17               | 358,620                  |
| 2009                                                         | 13,850,914.34           | 3,577,691                    | 3,537,806                     | 10,313,108                     | 30.15               | 342,060                  |
| 2010                                                         | 16,057,334.73           | 3,860,183                    | 3,817,148                     | 12,240,187                     | 30.02               | 407,734                  |
| 2011                                                         | 23,293,380.26           | 5,147,837                    | 5,090,447                     | 18,202,933                     | 29.96               | 607,575                  |
| 2012                                                         | 29,322,353.07           | 5,917,251                    | 5,851,284                     | 23,471,069                     | 29.67               | 791,071                  |
| 2013                                                         | 35,142,628.75           | 6,374,873                    | 6,303,804                     | 28,838,825                     | 29.34               | 982,918                  |
| 2014                                                         | 36,813,149.87           | 5,871,697                    | 5,806,237                     | 31,006,913                     | 28.98               | 1,069,942                |
| 2015                                                         | 42,106,917.57           | 5,777,069                    | 5,712,664                     | 36,394,254                     | 28.29               | 1,286,471                |
| 2016                                                         | 33,085,326.33           | 3,738,642                    | 3,696,963                     | 29,388,363                     | 27.46               | 1,070,224                |
| 2017                                                         | 52,187,008.30           | 4,587,238                    | 4,536,098                     | 47,650,910                     | 26.36               | 1,807,698                |
| 2018                                                         | 57,176,747.67           | 3,310,534                    | 3,273,627                     | 53,903,121                     | 24.41               | 2,208,239                |
| 2019                                                         | 56,625,123.00           | 1,370,328                    | 1,355,051                     | 55,270,072                     | 20.12               | 2,747,021                |
|                                                              | 591,846,194.45          | 136,725,900                  | 135,201,627                   | 456,644,567                    |                     | 17,282,618               |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. |                         |                              |                               |                                |                     | 26.4 2.92                |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>(1)                 | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 44-S1 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1913                        | 2.15                    | 2                            | 2                             |                                |                     |                          |
| 1914                        | 15.60                   | 16                           | 16                            |                                |                     |                          |
| 1915                        | 20.85                   | 21                           | 21                            |                                |                     |                          |
| 1916                        | 55.39                   | 55                           | 55                            |                                |                     |                          |
| 1917                        | 167.77                  | 168                          | 168                           |                                |                     |                          |
| 1918                        | 673.10                  | 673                          | 673                           |                                |                     |                          |
| 1919                        | 456.82                  | 457                          | 457                           |                                |                     |                          |
| 1920                        | 269.42                  | 269                          | 269                           |                                |                     |                          |
| 1921                        | 590.69                  | 591                          | 591                           |                                |                     |                          |
| 1922                        | 889.25                  | 889                          | 889                           |                                |                     |                          |
| 1923                        | 1,568.72                | 1,569                        | 1,569                         |                                |                     |                          |
| 1924                        | 1,159.37                | 1,159                        | 1,159                         |                                |                     |                          |
| 1925                        | 2,456.70                | 2,457                        | 2,457                         |                                |                     |                          |
| 1926                        | 3,028.18                | 3,028                        | 3,028                         |                                |                     |                          |
| 1927                        | 4,188.97                | 4,189                        | 4,189                         |                                |                     |                          |
| 1928                        | 5,243.25                | 5,243                        | 5,243                         |                                |                     |                          |
| 1929                        | 4,509.25                | 4,509                        | 4,509                         |                                |                     |                          |
| 1930                        | 349.21                  | 349                          | 349                           |                                |                     |                          |
| 1931                        | 22.32                   | 22                           | 22                            |                                |                     |                          |
| 1934                        | 117.14                  | 115                          | 117                           |                                |                     |                          |
| 1935                        | 24.28                   | 24                           | 24                            |                                |                     |                          |
| 1936                        | 426.56                  | 415                          | 427                           |                                |                     |                          |
| 1937                        | 70.08                   | 68                           | 70                            |                                |                     |                          |
| 1938                        | 211.99                  | 204                          | 212                           |                                |                     |                          |
| 1939                        | 388.56                  | 371                          | 386                           | 3                              | 2.01                | 1                        |
| 1941                        | 1,943.10                | 1,830                        | 1,906                         | 37                             | 2.57                | 14                       |
| 1942                        | 2,678.35                | 2,505                        | 2,609                         | 69                             | 2.85                | 24                       |
| 1943                        | 1,760.42                | 1,635                        | 1,703                         | 57                             | 3.13                | 18                       |
| 1944                        | 109.76                  | 101                          | 105                           | 5                              | 3.41                | 1                        |
| 1945                        | 653.52                  | 599                          | 624                           | 30                             | 3.70                | 8                        |
| 1946                        | 3,952.06                | 3,594                        | 3,743                         | 209                            | 3.99                | 52                       |
| 1947                        | 2,138.31                | 1,930                        | 2,010                         | 128                            | 4.28                | 30                       |
| 1948                        | 14,744.40               | 13,210                       | 13,757                        | 987                            | 4.58                | 216                      |
| 1949                        | 15,469.13               | 13,757                       | 14,326                        | 1,143                          | 4.87                | 235                      |
| 1950                        | 27,726.77               | 24,462                       | 25,475                        | 2,252                          | 5.18                | 435                      |
| 1951                        | 52,326.27               | 45,809                       | 47,705                        | 4,621                          | 5.48                | 843                      |
| 1952                        | 33,391.59               | 29,005                       | 30,206                        | 3,186                          | 5.78                | 551                      |
| 1953                        | 18,101.52               | 15,596                       | 16,242                        | 1,860                          | 6.09                | 305                      |
| 1954                        | 51,588.97               | 44,073                       | 45,897                        | 5,692                          | 6.41                | 888                      |
| 1955                        | 64,927.94               | 55,011                       | 57,288                        | 7,640                          | 6.72                | 1,137                    |
| 1956                        | 29,519.06               | 24,796                       | 25,822                        | 3,697                          | 7.04                | 525                      |
| 1957                        | 126,689.71              | 105,498                      | 109,865                       | 16,825                         | 7.36                | 2,286                    |
| 1958                        | 163,860.50              | 135,223                      | 140,820                       | 23,040                         | 7.69                | 2,996                    |



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>(1)                 | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 44-S1 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1959                        | 167,569.55              | 137,027                      | 142,699                       | 24,871                         | 8.02                | 3,101                    |
| 1960                        | 171,424.54              | 138,893                      | 144,642                       | 26,783                         | 8.35                | 3,208                    |
| 1961                        | 222,354.07              | 178,439                      | 185,825                       | 36,529                         | 8.69                | 4,204                    |
| 1962                        | 219,653.52              | 174,574                      | 181,800                       | 37,854                         | 9.03                | 4,192                    |
| 1963                        | 136,948.60              | 107,754                      | 112,214                       | 24,735                         | 9.38                | 2,637                    |
| 1964                        | 203,595.04              | 158,572                      | 165,136                       | 38,459                         | 9.73                | 3,953                    |
| 1965                        | 237,708.44              | 183,252                      | 190,838                       | 46,870                         | 10.08               | 4,650                    |
| 1966                        | 246,716.03              | 188,178                      | 195,967                       | 50,749                         | 10.44               | 4,861                    |
| 1967                        | 244,011.30              | 184,063                      | 191,682                       | 52,329                         | 10.81               | 4,841                    |
| 1968                        | 193,794.46              | 144,553                      | 150,537                       | 43,257                         | 11.18               | 3,869                    |
| 1969                        | 196,612.48              | 145,002                      | 151,004                       | 45,608                         | 11.55               | 3,949                    |
| 1970                        | 167,680.86              | 122,216                      | 127,275                       | 40,406                         | 11.93               | 3,387                    |
| 1971                        | 289,691.00              | 208,578                      | 217,212                       | 72,479                         | 12.32               | 5,883                    |
| 1972                        | 245,650.49              | 174,692                      | 181,923                       | 63,727                         | 12.71               | 5,014                    |
| 1973                        | 143,556.76              | 100,816                      | 104,989                       | 38,568                         | 13.10               | 2,944                    |
| 1974                        | 186,076.88              | 128,942                      | 134,279                       | 51,798                         | 13.51               | 3,834                    |
| 1975                        | 220,164.83              | 150,513                      | 156,743                       | 63,422                         | 13.92               | 4,556                    |
| 1976                        | 102,338.30              | 79,241                       | 82,521                        | 19,817                         | 12.68               | 1,563                    |
| 1977                        | 182,755.51              | 139,808                      | 145,595                       | 37,161                         | 13.06               | 2,845                    |
| 1978                        | 179,425.41              | 135,520                      | 141,130                       | 38,295                         | 13.45               | 2,847                    |
| 1979                        | 306,477.31              | 228,387                      | 237,841                       | 68,636                         | 13.85               | 4,956                    |
| 1980                        | 597,022.70              | 438,633                      | 456,790                       | 140,233                        | 14.26               | 9,834                    |
| 1981                        | 644,770.16              | 469,135                      | 488,554                       | 156,216                        | 14.41               | 10,841                   |
| 1982                        | 436,775.94              | 312,819                      | 325,768                       | 111,008                        | 14.86               | 7,470                    |
| 1983                        | 325,495.69              | 229,279                      | 238,770                       | 86,726                         | 15.32               | 5,661                    |
| 1984                        | 431,245.22              | 300,060                      | 312,481                       | 118,764                        | 15.52               | 7,652                    |
| 1985                        | 552,137.35              | 377,165                      | 392,777                       | 159,360                        | 16.01               | 9,954                    |
| 1986                        | 598,252.21              | 402,863                      | 419,539                       | 178,713                        | 16.25               | 10,998                   |
| 1987                        | 603,928.96              | 398,472                      | 414,966                       | 188,963                        | 16.76               | 11,275                   |
| 1988                        | 674,866.38              | 437,921                      | 456,048                       | 218,818                        | 17.04               | 12,841                   |
| 1989                        | 766,058.43              | 488,286                      | 508,498                       | 257,560                        | 17.35               | 14,845                   |
| 1990                        | 484,323.90              | 301,443                      | 313,921                       | 170,403                        | 17.90               | 9,520                    |
| 1991                        | 540,238.59              | 329,492                      | 343,131                       | 197,108                        | 18.23               | 10,812                   |
| 1992                        | 807,332.82              | 481,816                      | 501,760                       | 305,573                        | 18.58               | 16,446                   |
| 1993                        | 937,825.83              | 546,752                      | 569,384                       | 368,442                        | 18.95               | 19,443                   |
| 1994                        | 387,442.18              | 220,300                      | 229,419                       | 158,023                        | 19.35               | 8,167                    |
| 1995                        | 8,095.53                | 4,482                        | 4,668                         | 3,428                          | 19.75               | 174                      |
| 1996                        | 1,727,796.70            | 929,900                      | 968,392                       | 759,405                        | 20.17               | 37,650                   |
| 1997                        | 734,340.02              | 383,325                      | 399,192                       | 335,148                        | 20.60               | 16,269                   |
| 1998                        | 1,051,611.02            | 531,274                      | 553,266                       | 498,345                        | 21.06               | 23,663                   |
| 1999                        | 1,199,804.51            | 585,385                      | 609,617                       | 590,188                        | 21.52               | 27,425                   |
| 2000                        | 42,511.30               | 19,980                       | 20,807                        | 21,704                         | 21.99               | 987                      |
| 2001                        | 480,970.45              | 217,110                      | 226,097                       | 254,873                        | 22.48               | 11,338                   |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>(1)                                                  | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|--------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 44-S1                                  |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                      |                         |                              |                               |                                |                     |                          |
| 2002                                                         | 1,151,597.15            | 497,720                      | 518,323                       | 633,274                        | 22.99               | 27,546                   |
| 2003                                                         | 851,192.92              | 351,117                      | 365,651                       | 485,542                        | 23.50               | 20,661                   |
| 2004                                                         | 1,142,607.36            | 448,131                      | 466,681                       | 675,926                        | 24.02               | 28,140                   |
| 2005                                                         | 504,183.27              | 187,153                      | 194,900                       | 309,283                        | 24.56               | 12,593                   |
| 2006                                                         | 508,219.90              | 178,385                      | 185,769                       | 322,451                        | 24.96               | 12,919                   |
| 2007                                                         | 1,037,272.66            | 341,055                      | 355,173                       | 682,100                        | 25.52               | 26,728                   |
| 2008                                                         | 1,072,129.28            | 327,964                      | 341,540                       | 730,589                        | 26.09               | 28,003                   |
| 2009                                                         | 1,411,899.87            | 398,721                      | 415,226                       | 996,674                        | 26.68               | 37,357                   |
| 2010                                                         | 1,112,737.72            | 287,531                      | 299,433                       | 813,305                        | 27.26               | 29,835                   |
| 2011                                                         | 1,052,089.83            | 245,032                      | 255,175                       | 796,915                        | 28.00               | 28,461                   |
| 2012                                                         | 1,351,246.27            | 280,789                      | 292,412                       | 1,058,834                      | 28.60               | 37,022                   |
| 2013                                                         | 1,304,812.53            | 237,476                      | 247,306                       | 1,057,507                      | 29.21               | 36,204                   |
| 2014                                                         | 1,136,802.82            | 176,318                      | 183,616                       | 953,187                        | 29.96               | 31,815                   |
| 2015                                                         | 2,513,171.24            | 321,183                      | 334,478                       | 2,178,693                      | 30.71               | 70,944                   |
| 2016                                                         | 1,268,081.09            | 126,935                      | 132,189                       | 1,135,892                      | 31.47               | 36,094                   |
| 2017                                                         | 1,252,204.29            | 91,286                       | 95,065                        | 1,157,139                      | 32.30               | 35,825                   |
| 2018                                                         | 1,105,011.13            | 47,957                       | 49,942                        | 1,055,069                      | 33.10               | 31,875                   |
| 2019                                                         | 1,058,000.00            | 15,235                       | 15,866                        | 1,042,134                      | 34.10               | 30,561                   |
|                                                              | 39,768,797.60           | 16,720,397                   | 17,411,447                    | 22,357,351                     |                     | 937,707                  |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. |                         |                              |                               |                                |                     | 23.8 2.36                |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381.1 METERS - AMR

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>(1)                                                      | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 15-S2.5                                    |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                          |                         |                              |                               |                                |                     |                          |
| 2000                                                             | 296,427.01              | 270,519                      | 276,972                       | 19,455                         | 1.87                | 10,404                   |
| 2001                                                             | 278,746.25              | 250,091                      | 256,057                       | 22,689                         | 2.12                | 10,702                   |
| 2003                                                             | 514.10                  | 444                          | 455                           | 59                             | 2.62                | 23                       |
| 2004                                                             | 107,825.28              | 90,746                       | 92,911                        | 14,914                         | 2.92                | 5,108                    |
| 2005                                                             | 169,036.06              | 138,238                      | 141,536                       | 27,500                         | 3.23                | 8,514                    |
| 2007                                                             | 107,411.45              | 81,364                       | 83,305                        | 24,106                         | 4.00                | 6,026                    |
| 2008                                                             | 485,486.24              | 350,036                      | 358,386                       | 127,100                        | 4.45                | 28,562                   |
| 2009                                                             | 420,783.25              | 285,880                      | 292,700                       | 128,083                        | 4.96                | 25,823                   |
| 2010                                                             | 824,868.47              | 521,894                      | 534,344                       | 290,524                        | 5.52                | 52,631                   |
| 2011                                                             | 11,263,089.05           | 6,539,350                    | 6,695,352                     | 4,567,737                      | 6.14                | 743,931                  |
| 2012                                                             | 8,735,379.14            | 4,572,971                    | 4,682,063                     | 4,053,316                      | 6.83                | 593,458                  |
| 2014                                                             | 306,936.92              | 121,731                      | 124,635                       | 182,302                        | 8.37                | 21,780                   |
| 2015                                                             | 372,440.91              | 122,012                      | 124,923                       | 247,518                        | 9.24                | 26,788                   |
| 2016                                                             | 392,723.42              | 100,616                      | 103,016                       | 289,707                        | 10.16               | 28,514                   |
| 2017                                                             | 189,201.48              | 35,343                       | 36,186                        | 153,015                        | 11.06               | 13,835                   |
| 2018                                                             | 195,007.00              | 21,529                       | 22,043                        | 172,964                        | 12.09               | 14,306                   |
| 2019                                                             | 186,707.00              | 6,871                        | 7,035                         | 179,672                        | 13.09               | 13,726                   |
|                                                                  | 24,332,583.03           | 13,509,635                   | 13,831,919                    | 10,500,664                     |                     | 1,604,131                |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.5 |                         |                              |                               |                                |                     | 6.59                     |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 382 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>(1)                 | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 55-R3 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1937                        | 2,368.24                | 2,259                        | 2,368                         |                                |                     |                          |
| 1938                        | 6,270.79                | 5,954                        | 6,252                         | 19                             | 2.78                | 7                        |
| 1939                        | 5,007.03                | 4,731                        | 4,968                         | 39                             | 3.03                | 13                       |
| 1940                        | 4,685.47                | 4,405                        | 4,625                         | 60                             | 3.29                | 18                       |
| 1941                        | 7,003.15                | 6,551                        | 6,879                         | 124                            | 3.55                | 35                       |
| 1942                        | 5,467.25                | 5,090                        | 5,345                         | 122                            | 3.80                | 32                       |
| 1943                        | 2,566.34                | 2,377                        | 2,496                         | 70                             | 4.06                | 17                       |
| 1944                        | 2,670.15                | 2,460                        | 2,583                         | 87                             | 4.32                | 20                       |
| 1945                        | 3,637.71                | 3,335                        | 3,502                         | 136                            | 4.58                | 30                       |
| 1946                        | 9,014.32                | 8,223                        | 8,635                         | 379                            | 4.83                | 78                       |
| 1947                        | 13,397.17               | 12,155                       | 12,763                        | 634                            | 5.10                | 124                      |
| 1948                        | 17,341.42               | 15,651                       | 16,434                        | 907                            | 5.36                | 169                      |
| 1949                        | 22,766.35               | 20,440                       | 21,463                        | 1,303                          | 5.62                | 232                      |
| 1950                        | 26,886.45               | 24,002                       | 25,203                        | 1,683                          | 5.90                | 285                      |
| 1951                        | 23,798.01               | 21,128                       | 22,185                        | 1,613                          | 6.17                | 261                      |
| 1952                        | 25,136.94               | 22,185                       | 23,295                        | 1,842                          | 6.46                | 285                      |
| 1953                        | 30,471.78               | 26,732                       | 28,070                        | 2,402                          | 6.75                | 356                      |
| 1954                        | 28,996.76               | 25,275                       | 26,540                        | 2,457                          | 7.06                | 348                      |
| 1955                        | 36,858.54               | 31,919                       | 33,516                        | 3,343                          | 7.37                | 454                      |
| 1956                        | 39,378.59               | 33,866                       | 35,561                        | 3,818                          | 7.70                | 496                      |
| 1957                        | 36,617.70               | 31,265                       | 32,830                        | 3,788                          | 8.04                | 471                      |
| 1958                        | 47,637.40               | 40,362                       | 42,382                        | 5,255                          | 8.40                | 626                      |
| 1959                        | 58,311.64               | 49,014                       | 51,467                        | 6,845                          | 8.77                | 781                      |
| 1960                        | 42,933.83               | 35,783                       | 37,574                        | 5,360                          | 9.16                | 585                      |
| 1961                        | 37,555.03               | 31,027                       | 32,580                        | 4,975                          | 9.56                | 520                      |
| 1962                        | 54,209.76               | 44,373                       | 46,594                        | 7,616                          | 9.98                | 763                      |
| 1963                        | 58,240.45               | 47,217                       | 49,580                        | 8,660                          | 10.41               | 832                      |
| 1964                        | 105,321.81              | 84,526                       | 88,756                        | 16,566                         | 10.86               | 1,525                    |
| 1965                        | 140,887.17              | 111,864                      | 117,462                       | 23,425                         | 11.33               | 2,068                    |
| 1966                        | 131,512.48              | 103,249                      | 108,416                       | 23,096                         | 11.82               | 1,954                    |
| 1967                        | 121,949.98              | 94,611                       | 99,346                        | 22,604                         | 12.33               | 1,833                    |
| 1968                        | 157,728.15              | 120,877                      | 126,926                       | 30,802                         | 12.85               | 2,397                    |
| 1969                        | 150,171.84              | 113,613                      | 119,299                       | 30,873                         | 13.39               | 2,306                    |
| 1970                        | 138,377.72              | 103,306                      | 108,476                       | 29,902                         | 13.94               | 2,145                    |
| 1971                        | 121,492.00              | 89,440                       | 93,916                        | 27,576                         | 14.51               | 1,900                    |
| 1972                        | 76,745.24               | 55,675                       | 58,461                        | 18,284                         | 15.10               | 1,211                    |
| 1973                        | 71,615.13               | 51,159                       | 53,719                        | 17,896                         | 15.71               | 1,139                    |
| 1974                        | 12,888.52               | 9,064                        | 9,518                         | 3,371                          | 16.32               | 207                      |
| 1975                        | 23,153.57               | 16,014                       | 16,815                        | 6,339                          | 16.96               | 374                      |
| 1976                        | 43,464.84               | 31,764                       | 33,354                        | 10,111                         | 16.02               | 631                      |
| 1977                        | 49,386.55               | 35,469                       | 37,244                        | 12,143                         | 16.67               | 728                      |
| 1978                        | 48,059.62               | 33,906                       | 35,603                        | 12,457                         | 17.32               | 719                      |
| 1979                        | 115,117.70              | 80,191                       | 84,204                        | 30,914                         | 17.64               | 1,752                    |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 382 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>(1)                 | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 55-R3 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1980                        | 278,548.02              | 190,360                      | 199,886                       | 78,662                         | 18.30               | 4,298                    |
| 1981                        | 381,149.24              | 255,332                      | 268,110                       | 113,039                        | 18.97               | 5,959                    |
| 1982                        | 299,387.03              | 196,458                      | 206,289                       | 93,098                         | 19.65               | 4,738                    |
| 1983                        | 351,735.53              | 225,955                      | 237,263                       | 114,473                        | 20.32               | 5,634                    |
| 1984                        | 426,719.17              | 268,150                      | 281,569                       | 145,150                        | 20.99               | 6,915                    |
| 1985                        | 444,393.30              | 272,902                      | 286,559                       | 157,834                        | 21.68               | 7,280                    |
| 1986                        | 517,588.49              | 312,106                      | 327,725                       | 189,863                        | 22.06               | 8,607                    |
| 1987                        | 582,759.72              | 342,779                      | 359,933                       | 222,827                        | 22.75               | 9,795                    |
| 1988                        | 667,429.86              | 382,638                      | 401,786                       | 265,644                        | 23.45               | 11,328                   |
| 1989                        | 762,433.37              | 425,590                      | 446,888                       | 315,545                        | 24.14               | 13,071                   |
| 1990                        | 774,132.84              | 420,199                      | 441,227                       | 332,906                        | 24.85               | 13,397                   |
| 1991                        | 695,482.21              | 366,658                      | 385,007                       | 310,475                        | 25.56               | 12,147                   |
| 1992                        | 759,456.33              | 388,462                      | 407,902                       | 351,554                        | 26.26               | 13,387                   |
| 1993                        | 644,116.58              | 319,224                      | 335,199                       | 308,918                        | 26.97               | 11,454                   |
| 1994                        | 746,856.97              | 358,043                      | 375,961                       | 370,896                        | 27.69               | 13,395                   |
| 1995                        | 658,729.08              | 304,992                      | 320,255                       | 338,474                        | 28.41               | 11,914                   |
| 1996                        | 751,592.59              | 335,586                      | 352,380                       | 399,213                        | 29.13               | 13,705                   |
| 1997                        | 719,219.34              | 309,120                      | 324,589                       | 394,630                        | 29.85               | 13,220                   |
| 1998                        | 617,390.65              | 254,859                      | 267,613                       | 349,778                        | 30.58               | 11,438                   |
| 1999                        | 518,951.09              | 205,297                      | 215,571                       | 303,380                        | 31.32               | 9,686                    |
| 2000                        | 1,143,317.62            | 432,517                      | 454,162                       | 689,156                        | 32.05               | 21,503                   |
| 2001                        | 1,026,955.65            | 370,526                      | 389,068                       | 637,888                        | 32.78               | 19,460                   |
| 2002                        | 1,000,475.99            | 341,362                      | 358,445                       | 642,031                        | 33.78               | 19,006                   |
| 2003                        | 1,098,445.89            | 355,237                      | 373,014                       | 725,432                        | 34.52               | 21,015                   |
| 2004                        | 1,069,355.69            | 326,581                      | 342,924                       | 726,432                        | 35.26               | 20,602                   |
| 2005                        | 766,899.51              | 220,177                      | 231,195                       | 535,705                        | 36.01               | 14,877                   |
| 2006                        | 214,755.58              | 57,683                       | 60,570                        | 154,186                        | 36.75               | 4,196                    |
| 2007                        | 2,945,317.04            | 736,329                      | 773,177                       | 2,172,140                      | 37.50               | 57,924                   |
| 2008                        | 1,420,191.46            | 328,348                      | 344,780                       | 1,075,411                      | 38.25               | 28,115                   |
| 2009                        | 1,836,482.39            | 387,498                      | 406,890                       | 1,429,592                      | 39.25               | 36,423                   |
| 2010                        | 1,432,189.43            | 274,837                      | 288,591                       | 1,143,598                      | 40.00               | 28,590                   |
| 2011                        | 1,564,001.73            | 269,947                      | 283,456                       | 1,280,546                      | 40.76               | 31,417                   |
| 2012                        | 1,662,814.36            | 254,411                      | 267,142                       | 1,395,672                      | 41.52               | 33,614                   |
| 2013                        | 1,027,199.70            | 136,823                      | 143,670                       | 883,530                        | 42.28               | 20,897                   |
| 2014                        | 1,229,797.05            | 139,336                      | 146,309                       | 1,083,488                      | 43.04               | 25,174                   |
| 2015                        | 1,352,322.55            | 126,036                      | 132,343                       | 1,219,980                      | 43.81               | 27,847                   |
| 2016                        | 1,382,808.87            | 100,668                      | 105,706                       | 1,277,103                      | 44.58               | 28,647                   |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 382 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>(1)                                                       | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 55-R3                                       |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                           |                         |                              |                               |                                |                     |                          |
| 2017                                                              | 1,954,817.13            | 103,801                      | 108,996                       | 1,845,821                      | 45.31               | 40,738                   |
| 2018                                                              | 2,731,999.90            | 86,331                       | 90,651                        | 2,641,349                      | 45.90               | 57,546                   |
| 2019                                                              | 2,599,630.00            | 28,076                       | 29,481                        | 2,570,149                      | 46.01               | 55,861                   |
|                                                                   | 43,214,949.54           | 12,903,741                   | 13,549,487                    | 29,665,463                     |                     | 825,547                  |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 35.9 |                         |                              |                               |                                |                     | 1.91                     |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 383 HOUSE REGULATORS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>(1)                  | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE... IOWA 45-S2 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT... 0     |                         |                              |                               |                                |                     |                          |
| 1949                         | 6.69                    | 6                            | 7                             |                                |                     |                          |
| 1955                         | 329.41                  | 291                          | 329                           |                                |                     |                          |
| 1957                         | 383.84                  | 334                          | 384                           |                                |                     |                          |
| 1958                         | 557.76                  | 483                          | 558                           |                                |                     |                          |
| 1960                         | 287.05                  | 245                          | 285                           | 2                              | 6.61                |                          |
| 1961                         | 757.00                  | 641                          | 745                           | 12                             | 6.89                | 2                        |
| 1962                         | 5,836.11                | 4,906                        | 5,700                         | 136                            | 7.17                | 19                       |
| 1963                         | 9,451.06                | 7,882                        | 9,158                         | 293                            | 7.47                | 39                       |
| 1964                         | 13,518.00               | 11,184                       | 12,994                        | 524                            | 7.77                | 67                       |
| 1965                         | 17,054.50               | 13,992                       | 16,256                        | 798                            | 8.08                | 99                       |
| 1966                         | 43,631.78               | 35,497                       | 41,242                        | 2,390                          | 8.39                | 285                      |
| 1967                         | 34,195.42               | 27,577                       | 32,040                        | 2,155                          | 8.71                | 247                      |
| 1968                         | 45,254.33               | 36,163                       | 42,015                        | 3,239                          | 9.04                | 358                      |
| 1969                         | 41,727.83               | 33,030                       | 38,375                        | 3,353                          | 9.38                | 357                      |
| 1970                         | 45,580.42               | 35,725                       | 41,506                        | 4,074                          | 9.73                | 419                      |
| 1971                         | 38,708.94               | 30,038                       | 34,899                        | 3,810                          | 10.08               | 378                      |
| 1972                         | 22,492.20               | 17,269                       | 20,064                        | 2,428                          | 10.45               | 232                      |
| 1973                         | 19,966.51               | 15,166                       | 17,620                        | 2,347                          | 10.82               | 217                      |
| 1974                         | 2,245.93                | 1,686                        | 1,959                         | 287                            | 11.21               | 26                       |
| 1975                         | 1,856.66                | 1,378                        | 1,601                         | 256                            | 11.60               | 22                       |
| 1976                         | 3,503.01                | 2,804                        | 3,258                         | 245                            | 10.85               | 23                       |
| 1977                         | 3,823.18                | 3,022                        | 3,511                         | 312                            | 11.26               | 28                       |
| 1978                         | 5,869.94                | 4,604                        | 5,349                         | 521                            | 11.41               | 46                       |
| 1979                         | 13,103.53               | 10,137                       | 11,777                        | 1,327                          | 11.85               | 112                      |
| 1980                         | 26,079.34               | 19,883                       | 23,101                        | 2,978                          | 12.31               | 242                      |
| 1981                         | 43,222.54               | 32,616                       | 37,894                        | 5,329                          | 12.52               | 426                      |
| 1982                         | 41,259.44               | 30,635                       | 35,593                        | 5,666                          | 13.01               | 436                      |
| 1983                         | 42,842.54               | 31,275                       | 36,336                        | 6,507                          | 13.50               | 482                      |
| 1984                         | 47,309.12               | 34,091                       | 39,608                        | 7,701                          | 13.76               | 560                      |
| 1985                         | 48,403.80               | 34,231                       | 39,771                        | 8,633                          | 14.28               | 605                      |
| 1986                         | 62,992.91               | 43,679                       | 50,748                        | 12,245                         | 14.81               | 827                      |
| 1987                         | 68,645.85               | 46,851                       | 54,433                        | 14,213                         | 15.12               | 940                      |
| 1988                         | 85,145.82               | 56,860                       | 66,062                        | 19,084                         | 15.67               | 1,218                    |
| 1989                         | 91,650.54               | 60,104                       | 69,831                        | 21,820                         | 16.01               | 1,363                    |
| 1990                         | 89,358.64               | 57,207                       | 66,465                        | 22,894                         | 16.58               | 1,381                    |
| 1991                         | 74,583.98               | 46,555                       | 54,089                        | 20,495                         | 17.16               | 1,194                    |
| 1992                         | 81,994.84               | 50,058                       | 58,159                        | 23,836                         | 17.55               | 1,358                    |
| 1993                         | 59,123.84               | 35,096                       | 40,776                        | 18,348                         | 18.14               | 1,011                    |
| 1994                         | 71,627.72               | 41,279                       | 47,959                        | 23,669                         | 18.75               | 1,262                    |
| 1995                         | 79,987.17               | 44,681                       | 51,912                        | 28,075                         | 19.36               | 1,450                    |
| 1996                         | 84,705.00               | 45,978                       | 53,419                        | 31,286                         | 19.79               | 1,581                    |
| 1997                         | 98,045.26               | 51,395                       | 59,712                        | 38,333                         | 20.42               | 1,877                    |
| 1998                         | 36,165.23               | 18,271                       | 21,228                        | 14,937                         | 21.06               | 709                      |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 383 HOUSE REGULATORS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>(1)                                                       | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 45-S2                                       |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                           |                         |                              |                               |                                |                     |                          |
| 1999                                                              | 18,997.33               | 9,229                        | 10,723                        | 8,274                          | 21.70               | 381                      |
| 2000                                                              | 178,084.85              | 82,649                       | 96,024                        | 82,061                         | 22.52               | 3,644                    |
| 2001                                                              | 69,228.72               | 30,738                       | 35,712                        | 33,517                         | 23.17               | 1,447                    |
| 2002                                                              | 376,260.72              | 159,346                      | 185,133                       | 191,128                        | 23.82               | 8,024                    |
| 2003                                                              | 544,257.45              | 218,247                      | 253,567                       | 290,690                        | 24.65               | 11,793                   |
| 2004                                                              | 895,959.11              | 340,285                      | 395,354                       | 500,605                        | 25.31               | 19,779                   |
| 2005                                                              | 717,261.91              | 255,847                      | 297,251                       | 420,011                        | 26.15               | 16,062                   |
| 2006                                                              | 425,363.76              | 141,816                      | 164,766                       | 260,598                        | 26.99               | 9,655                    |
| 2007                                                              | 855,088.65              | 265,077                      | 307,975                       | 547,114                        | 27.82               | 19,666                   |
| 2008                                                              | 553,324.80              | 158,472                      | 184,118                       | 369,207                        | 28.66               | 12,882                   |
| 2009                                                              | 784,905.69              | 206,038                      | 239,382                       | 545,524                        | 29.50               | 18,492                   |
| 2010                                                              | 623,215.47              | 148,575                      | 172,619                       | 450,596                        | 30.34               | 14,852                   |
| 2011                                                              | 699,935.93              | 149,366                      | 173,538                       | 526,398                        | 31.34               | 16,796                   |
| 2012                                                              | 687,637.81              | 129,413                      | 150,357                       | 537,281                        | 32.34               | 16,614                   |
| 2013                                                              | 507,621.47              | 83,148                       | 96,604                        | 411,017                        | 33.18               | 12,387                   |
| 2014                                                              | 641,554.37              | 88,919                       | 103,309                       | 538,245                        | 34.18               | 15,747                   |
| 2015                                                              | 543,503.36              | 61,633                       | 71,607                        | 471,896                        | 35.18               | 13,414                   |
| 2016                                                              | 545,640.80              | 48,126                       | 55,915                        | 489,726                        | 36.18               | 13,536                   |
| 2017                                                              | 688,735.73              | 44,079                       | 51,212                        | 637,524                        | 37.14               | 17,165                   |
| 2018                                                              | 700,007.75              | 26,460                       | 30,742                        | 669,266                        | 38.18               | 17,529                   |
| 2019                                                              | 646,105.00              | 8,141                        | 9,459                         | 636,646                        | 39.18               | 16,249                   |
|                                                                   | 13,305,975.36           | 3,730,409                    | 4,334,095                     | 8,971,880                      |                     | 298,012                  |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 30.1 |                         |                              |                               |                                |                     | 2.24                     |



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 384 HOUSE REGULATOR INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>(1)                 | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 45-S2 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1956                        | 4,098.01                | 3,594                        | 4,098                         |                                |                     |                          |
| 1957                        | 11,093.12               | 9,663                        | 11,093                        |                                |                     |                          |
| 1958                        | 8,984.62                | 7,775                        | 8,985                         |                                |                     |                          |
| 1959                        | 10,504.99               | 9,027                        | 10,505                        |                                |                     |                          |
| 1960                        | 6,886.85                | 5,875                        | 6,887                         |                                |                     |                          |
| 1961                        | 5,770.97                | 4,887                        | 5,771                         |                                |                     |                          |
| 1962                        | 6,336.36                | 5,327                        | 6,336                         |                                |                     |                          |
| 1963                        | 9,429.02                | 7,864                        | 9,429                         |                                |                     |                          |
| 1964                        | 13,020.68               | 10,772                       | 13,021                        |                                |                     |                          |
| 1965                        | 14,473.42               | 11,875                       | 14,473                        |                                |                     |                          |
| 1966                        | 13,305.16               | 10,825                       | 13,305                        |                                |                     |                          |
| 1967                        | 17,106.02               | 13,795                       | 17,106                        |                                |                     |                          |
| 1968                        | 26,484.46               | 21,164                       | 26,484                        |                                |                     |                          |
| 1969                        | 37,452.06               | 29,646                       | 37,452                        |                                |                     |                          |
| 1970                        | 54,867.42               | 43,004                       | 54,867                        |                                |                     |                          |
| 1971                        | 52,330.89               | 40,609                       | 52,331                        |                                |                     |                          |
| 1972                        | 30,594.70               | 23,490                       | 30,595                        |                                |                     |                          |
| 1973                        | 41,286.72               | 31,360                       | 41,287                        |                                |                     |                          |
| 1974                        | 15,958.45               | 11,983                       | 15,893                        | 65                             | 11.21               | 6                        |
| 1975                        | 25,717.11               | 19,088                       | 25,316                        | 401                            | 11.60               | 35                       |
| 1976                        | 13,626.03               | 10,906                       | 13,626                        |                                |                     |                          |
| 1978                        | 1,304.20                | 1,023                        | 1,304                         |                                |                     |                          |
| 1979                        | 41,749.48               | 32,297                       | 41,749                        |                                |                     |                          |
| 1980                        | 78,231.18               | 59,643                       | 78,231                        |                                |                     |                          |
| 1981                        | 103,540.67              | 78,132                       | 103,541                       |                                |                     |                          |
| 1982                        | 111,541.38              | 82,819                       | 109,970                       | 1,571                          | 13.01               | 121                      |
| 1983                        | 94,279.56               | 68,824                       | 91,387                        | 2,893                          | 13.50               | 214                      |
| 1984                        | 100,051.83              | 72,097                       | 95,733                        | 4,319                          | 13.76               | 314                      |
| 1985                        | 116,774.98              | 82,583                       | 109,657                       | 7,118                          | 14.28               | 498                      |
| 1986                        | 125,389.90              | 86,945                       | 115,449                       | 9,941                          | 14.81               | 671                      |
| 1987                        | 160,772.64              | 109,727                      | 145,700                       | 15,073                         | 15.12               | 997                      |
| 1988                        | 175,315.37              | 117,076                      | 155,458                       | 19,857                         | 15.67               | 1,267                    |
| 1989                        | 145,310.01              | 95,294                       | 126,535                       | 18,775                         | 16.01               | 1,173                    |
| 1990                        | 142,228.97              | 91,055                       | 120,907                       | 21,322                         | 16.58               | 1,286                    |
| 1991                        | 135,142.11              | 84,356                       | 112,011                       | 23,131                         | 17.16               | 1,348                    |
| 1992                        | 132,043.34              | 80,612                       | 107,040                       | 25,003                         | 17.55               | 1,425                    |
| 1993                        | 112,250.88              | 66,632                       | 88,477                        | 23,774                         | 18.14               | 1,311                    |
| 1994                        | 183,968.70              | 106,021                      | 140,779                       | 43,190                         | 18.75               | 2,303                    |
| 1995                        | 147,476.46              | 82,380                       | 109,388                       | 38,088                         | 19.36               | 1,967                    |
| 1996                        | 122,299.49              | 66,384                       | 88,147                        | 34,152                         | 19.79               | 1,726                    |
| 1997                        | 182,246.23              | 95,533                       | 126,853                       | 55,393                         | 20.42               | 2,713                    |
| 1998                        | 181,143.04              | 91,513                       | 121,515                       | 59,628                         | 21.06               | 2,831                    |
| 1999                        | 139,857.78              | 67,943                       | 90,217                        | 49,641                         | 21.70               | 2,288                    |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 384 HOUSE REGULATOR INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>(1)                                                            | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|------------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 45-S2                                            |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                                |                         |                              |                               |                                |                     |                          |
| 2000                                                                   | 194,710.12              | 90,365                       | 119,990                       | 74,720                         | 22.52               | 3,318                    |
| 2001                                                                   | 229,158.59              | 101,746                      | 135,103                       | 94,056                         | 23.17               | 4,059                    |
| 2002                                                                   | 154,765.04              | 65,543                       | 87,031                        | 67,734                         | 23.82               | 2,844                    |
| 2003                                                                   | 133,893.06              | 53,691                       | 71,293                        | 62,600                         | 24.65               | 2,540                    |
|                                                                        | 3,864,772.07            | 2,362,763                    | 3,112,325                     | 752,447                        |                     | 37,255                   |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 20.2 0.96 |                         |                              |                               |                                |                     |                          |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING EQUIPMENT - OTHER THAN METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>(1)                   | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 30-R0.5 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0       |                         |                              |                               |                                |                     |                          |
| 1939                          | 91.15                   | 91                           | .91                           |                                |                     |                          |
| 1941                          | 235.99                  | 236                          | 236                           |                                |                     |                          |
| 1942                          | 458.81                  | 459                          | 459                           |                                |                     |                          |
| 1943                          | 2,937.04                | 2,937                        | 2,937                         |                                |                     |                          |
| 1944                          | 722.40                  | 722                          | 722                           |                                |                     |                          |
| 1945                          | 518.68                  | 519                          | 519                           |                                |                     |                          |
| 1946                          | 45.32                   | 45                           | 45                            |                                |                     |                          |
| 1947                          | 652.02                  | 652                          | 652                           |                                |                     |                          |
| 1948                          | 1,076.12                | 1,076                        | 1,076                         |                                |                     |                          |
| 1950                          | 1,505.09                | 1,505                        | 1,505                         |                                |                     |                          |
| 1951                          | 3,855.11                | 3,855                        | 3,855                         |                                |                     |                          |
| 1952                          | 3,466.65                | 3,467                        | 3,467                         |                                |                     |                          |
| 1953                          | 3,691.99                | 3,692                        | 3,692                         |                                |                     |                          |
| 1954                          | 11,119.35               | 11,119                       | 11,119                        |                                |                     |                          |
| 1955                          | 20,745.46               | 20,745                       | 20,745                        |                                |                     |                          |
| 1956                          | 19,555.32               | 19,555                       | 19,555                        |                                |                     |                          |
| 1957                          | 23,773.49               | 23,773                       | 23,773                        |                                |                     |                          |
| 1958                          | 22,037.86               | 22,038                       | 22,038                        |                                |                     |                          |
| 1959                          | 20,080.85               | 20,081                       | 20,081                        |                                |                     |                          |
| 1960                          | 22,848.37               | 22,658                       | 20,500                        | 2,348                          | 0.25                | 2,348                    |
| 1961                          | 28,964.36               | 28,250                       | 25,560                        | 3,404                          | 0.74                | 3,404                    |
| 1962                          | 11,831.57               | 11,350                       | 10,269                        | 1,563                          | 1.22                | 1,281                    |
| 1963                          | 33,046.70               | 31,185                       | 28,215                        | 4,832                          | 1.69                | 2,859                    |
| 1964                          | 23,732.32               | 22,031                       | 19,933                        | 3,799                          | 2.15                | 1,767                    |
| 1965                          | 29,469.25               | 26,905                       | 24,343                        | 5,126                          | 2.61                | 1,964                    |
| 1966                          | 25,696.62               | 23,093                       | 20,894                        | 4,803                          | 3.04                | 1,580                    |
| 1967                          | 47,115.04               | 41,665                       | 37,697                        | 9,418                          | 3.47                | 2,714                    |
| 1968                          | 46,526.53               | 40,493                       | 36,637                        | 9,890                          | 3.89                | 2,542                    |
| 1969                          | 47,158.68               | 40,399                       | 36,552                        | 10,607                         | 4.30                | 2,467                    |
| 1970                          | 42,251.88               | 35,632                       | 32,239                        | 10,013                         | 4.70                | 2,130                    |
| 1971                          | 96,448.48               | 80,052                       | 72,428                        | 24,020                         | 5.10                | 4,710                    |
| 1972                          | 72,384.57               | 59,114                       | 53,484                        | 18,901                         | 5.50                | 3,437                    |
| 1973                          | 38,782.65               | 31,155                       | 28,188                        | 10,595                         | 5.90                | 1,796                    |
| 1974                          | 24,891.42               | 19,672                       | 17,799                        | 7,092                          | 6.29                | 1,128                    |
| 1975                          | 23,356.21               | 18,148                       | 16,420                        | 6,936                          | 6.69                | 1,037                    |
| 1976                          | 694.80                  | 601                          | 544                           | 151                            | 6.75                | 22                       |
| 1977                          | 2,731.29                | 2,345                        | 2,122                         | 609                            | 7.00                | 87                       |
| 1978                          | 10,626.04               | 9,041                        | 8,180                         | 2,446                          | 7.28                | 336                      |
| 1979                          | 33,697.68               | 28,252                       | 25,562                        | 8,136                          | 7.81                | 1,042                    |
| 1980                          | 64,755.07               | 53,714                       | 48,599                        | 16,156                         | 8.12                | 1,990                    |
| 1981                          | 100,209.45              | 82,172                       | 74,347                        | 25,862                         | 8.45                | 3,061                    |
| 1982                          | 105,702.37              | 85,619                       | 77,465                        | 28,237                         | 8.80                | 3,209                    |
| 1983                          | 69,119.69               | 55,254                       | 49,992                        | 19,128                         | 9.16                | 2,088                    |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING EQUIPMENT - OTHER THAN METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>(1)                                                       | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 30-R0.5                                     |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                           |                         |                              |                               |                                |                     |                          |
| 1984                                                              | 31,584.04               | 24,891                       | 22,521                        | 9,063                          | 9.55                | 949                      |
| 1985                                                              | 40,320.50               | 31,438                       | 28,444                        | 11,876                         | 9.75                | 1,218                    |
| 1986                                                              | 81,673.02               | 62,660                       | 56,693                        | 24,980                         | 10.17               | 2,456                    |
| 1987                                                              | 19,005.85               | 14,330                       | 12,965                        | 6,041                          | 10.60               | 570                      |
| 1988                                                              | 55,200.70               | 41,036                       | 37,128                        | 18,073                         | 10.87               | 1,663                    |
| 1989                                                              | 67,568.92               | 49,258                       | 44,567                        | 23,002                         | 11.34               | 2,028                    |
| 1990                                                              | 66,259.87               | 47,495                       | 42,972                        | 23,288                         | 11.65               | 1,999                    |
| 1991                                                              | 111,483.00              | 78,484                       | 71,010                        | 40,473                         | 11.98               | 3,378                    |
| 1992                                                              | 87,686.27               | 60,521                       | 54,757                        | 32,929                         | 12.34               | 2,668                    |
| 1993                                                              | 116,549.85              | 78,764                       | 71,263                        | 45,287                         | 12.71               | 3,563                    |
| 1994                                                              | 175,661.84              | 116,007                      | 104,959                       | 70,703                         | 13.11               | 5,393                    |
| 1995                                                              | 122,431.01              | 78,895                       | 71,382                        | 51,049                         | 13.52               | 3,776                    |
| 1996                                                              | 175,164.84              | 110,319                      | 99,813                        | 75,352                         | 13.81               | 5,456                    |
| 1997                                                              | 104,496.58              | 64,182                       | 58,070                        | 46,427                         | 14.13               | 3,286                    |
| 1998                                                              | 115,503.12              | 68,794                       | 62,243                        | 53,260                         | 14.60               | 3,648                    |
| 1999                                                              | 53,523.07               | 30,942                       | 27,995                        | 25,528                         | 14.96               | 1,706                    |
| 2000                                                              | 158,773.07              | 89,167                       | 80,675                        | 78,098                         | 15.22               | 5,131                    |
| 2001                                                              | 12,946.05               | 7,017                        | 6,349                         | 6,597                          | 15.63               | 422                      |
| 2002                                                              | 227,272.93              | 118,909                      | 107,585                       | 119,688                        | 15.95               | 7,504                    |
| 2003                                                              | 468,525.49              | 235,762                      | 213,310                       | 255,215                        | 16.29               | 15,667                   |
| 2004                                                              | 13,403.29               | 6,482                        | 5,865                         | 7,538                          | 16.55               | 455                      |
| 2005                                                              | 55,544.99               | 25,695                       | 23,248                        | 32,297                         | 16.85               | 1,917                    |
| 2006                                                              | 148,842.65              | 65,699                       | 59,442                        | 89,401                         | 17.08               | 5,234                    |
| 2007                                                              | 203,144.25              | 85,077                       | 76,975                        | 126,169                        | 17.35               | 7,272                    |
| 2008                                                              | 227,645.98              | 90,057                       | 81,481                        | 146,165                        | 17.57               | 8,319                    |
| 2009                                                              | 177,799.11              | 65,892                       | 59,617                        | 118,182                        | 17.83               | 6,628                    |
| 2010                                                              | 259,907.47              | 89,876                       | 81,317                        | 178,590                        | 17.97               | 9,938                    |
| 2011                                                              | 228,666.78              | 73,082                       | 66,122                        | 162,545                        | 18.10               | 8,980                    |
| 2012                                                              | 200,867.88              | 58,754                       | 53,159                        | 147,709                        | 18.14               | 8,143                    |
| 2013                                                              | 291,596.82              | 76,952                       | 69,624                        | 221,973                        | 18.13               | 12,243                   |
| 2014                                                              | 196,547.43              | 45,953                       | 41,577                        | 154,970                        | 18.03               | 8,595                    |
| 2015                                                              | 305,525.91              | 61,594                       | 55,728                        | 249,798                        | 17.82               | 14,018                   |
| 2016                                                              | 548,898.39              | 91,831                       | 83,085                        | 465,813                        | 17.42               | 26,740                   |
| 2017                                                              | 646,109.45              | 84,770                       | 76,697                        | 569,412                        | 16.84               | 33,813                   |
| 2018                                                              | 1,334,644.11            | 116,514                      | 105,418                       | 1,229,226                      | 15.68               | 78,395                   |
| 2019                                                              | 1,299,816.00            | 48,353                       | 43,748                        | 1,256,068                      | 12.92               | 97,219                   |
|                                                                   | 9,569,200.27            | 3,480,819                    | 3,162,340                     | 6,406,860                      |                     | 449,389                  |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 14.3 |                         |                              |                               |                                |                     | 4.70                     |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 387 OTHER EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>(1)                                                            | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|------------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 32-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               | 14,042                       | 14,375                        |                                |                     |                          |
| 1959                                                                   | 188.29                  | 178                          | 188                           |                                |                     |                          |
| 1962                                                                   | 7,626.48                | 6,897                        | 7,417                         | 209                            | 3.06                | 68                       |
| 1967                                                                   | 445.13                  | 374                          | 402                           | 43                             | 5.14                | 8                        |
| 1972                                                                   | 7,910.24                | 6,150                        | 6,614                         | 1,296                          | 7.12                | 182                      |
| 1981                                                                   | 13,548.93               | 10,798                       | 11,612                        | 1,937                          | 9.81                | 197                      |
| 1985                                                                   | 14,556.64               | 10,948                       | 11,773                        | 2,784                          | 11.37               | 245                      |
| 1992                                                                   | 2,228.63                | 1,483                        | 1,595                         | 634                            | 13.82               | 46                       |
| 2010                                                                   | 68,488.09               | 22,642                       | 24,348                        | 44,140                         | 19.24               | 2,294                    |
| 2015                                                                   | 2,847.08                | 547                          | 588                           | 2,259                          | 18.92               | 119                      |
|                                                                        | 136,698.14              | 78,542                       | 83,395                        | 53,303                         |                     | 3,159                    |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.9 2.31 |                         |                              |                               |                                |                     |                          |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 387.4 OTHER EQUIPMENT - COMMUNICATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>(1)                 | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 25-R2 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1973                        | 917.13                  | 917                          | 917                           |                                |                     |                          |
| 1974                        | 11,561.27               | 11,446                       | 10,623                        | 938                            | 0.25                | 938                      |
| 1975                        | 3,189.09                | 3,125                        | 2,900                         | 289                            | 0.50                | 289                      |
| 1976                        | 6,308.81                | 6,202                        | 5,756                         | 553                            | 0.75                | 553                      |
| 1980                        | 1,144.78                | 1,094                        | 1,015                         | 130                            | 1.82                | 71                       |
| 1983                        | 10,695.21               | 9,994                        | 9,275                         | 1,420                          | 2.56                | 555                      |
| 1984                        | 4,730.23                | 4,366                        | 4,052                         | 678                            | 2.96                | 229                      |
| 1985                        | 27,353.09               | 25,006                       | 23,208                        | 4,145                          | 3.24                | 1,279                    |
| 1986                        | 61,596.14               | 55,917                       | 51,897                        | 9,699                          | 3.40                | 2,853                    |
| 1987                        | 40,005.58               | 35,885                       | 33,305                        | 6,701                          | 3.73                | 1,797                    |
| 1989                        | 3,425.59                | 2,999                        | 2,783                         | 643                            | 4.34                | 148                      |
| 1990                        | 37,952.71               | 32,806                       | 30,447                        | 7,506                          | 4.63                | 1,621                    |
| 1991                        | 31,594.95               | 26,925                       | 24,989                        | 6,606                          | 4.94                | 1,337                    |
| 1992                        | 6,510.50                | 5,461                        | 5,068                         | 1,442                          | 5.29                | 273                      |
| 1993                        | 1,718.09                | 1,411                        | 1,310                         | 408                            | 5.76                | 71                       |
| 1994                        | 4,082.11                | 3,300                        | 3,063                         | 1,019                          | 6.04                | 169                      |
| 2000                        | 47,842.64               | 33,026                       | 30,651                        | 17,192                         | 8.75                | 1,965                    |
| 2001                        | 142,467.12              | 94,883                       | 88,061                        | 54,406                         | 9.28                | 5,863                    |
| 2003                        | 2,326.24                | 1,432                        | 1,329                         | 997                            | 10.31               | 97                       |
| 2004                        | 119,576.43              | 70,431                       | 65,367                        | 54,209                         | 10.82               | 5,010                    |
| 2005                        | 235,835.64              | 132,351                      | 122,835                       | 113,001                        | 11.34               | 9,965                    |
| 2006                        | 17,269.88               | 9,163                        | 8,504                         | 8,766                          | 11.94               | 734                      |
| 2007                        | 9,937.59                | 4,981                        | 4,623                         | 5,315                          | 12.44               | 427                      |
| 2008                        | 0.11                    |                              |                               |                                |                     |                          |
| 2009                        | 5,832.45                | 2,542                        | 2,359                         | 3,473                          | 13.60               | 255                      |
| 2010                        | 123,486.39              | 49,617                       | 46,050                        | 77,436                         | 14.14               | 5,476                    |
| 2011                        | 49,875.40               | 18,274                       | 16,960                        | 32,915                         | 14.70               | 2,239                    |
| 2012                        | 163,197.40              | 53,855                       | 49,983                        | 113,214                        | 15.23               | 7,434                    |
| 2013                        | 708,244.07              | 206,666                      | 191,807                       | 516,437                        | 15.77               | 32,748                   |
| 2014                        | 2,010,015.43            | 507,328                      | 470,851                       | 1,539,164                      | 16.29               | 94,485                   |
| 2015                        | 778,635.92              | 164,681                      | 152,840                       | 625,796                        | 16.78               | 37,294                   |
| 2016                        | 1,916,275.07            | 323,850                      | 300,565                       | 1,615,710                      | 17.20               | 93,937                   |
| 2017                        | 1,644,420.52            | 208,184                      | 193,215                       | 1,451,206                      | 17.54               | 82,737                   |
|                             | 8,228,023.58            | 2,108,118                    | 1,956,608                     | 6,271,416                      |                     | 392,849                  |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.0 4.77

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, 2019

| YEAR<br>(1)                                                      | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 10-S3                                      |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                          |                         |                              |                               |                                |                     |                          |
| 2014                                                             | 2,053,366.00            | 1,170,008                    | 1,049,356                     | 1,004,010                      | 4.15                | 241,930                  |
|                                                                  | 2,053,366.00            | 1,170,008                    | 1,049,356                     | 1,004,010                      |                     | 241,930                  |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 4.2 |                         |                              |                               |                                |                     | 11.78                    |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 390.1 STRUCTURES AND IMPROVEMENTS - COMMUNICATION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>(1)                                                            | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|------------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 45-R2                                            |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                                |                         |                              |                               |                                |                     |                          |
| 1955                                                                   | 1,170.54                | 1,033                        | 1,171                         |                                |                     |                          |
| 1958                                                                   | 192.08                  | 166                          | 189                           | 3                              | 6.20                |                          |
| 1959                                                                   | 2,129.94                | 1,822                        | 2,070                         | 60                             | 6.51                | 9                        |
| 1971                                                                   | 17,971.09               | 13,634                       | 15,488                        | 2,483                          | 10.86               | 229                      |
| 1983                                                                   | 7,872.27                | 5,574                        | 6,332                         | 1,540                          | 15.05               | 102                      |
| 1984                                                                   | 3,449.87                | 2,400                        | 2,726                         | 724                            | 15.52               | 47                       |
| 1987                                                                   | 6,786.87                | 4,456                        | 5,062                         | 1,725                          | 17.00               | 101                      |
| 1988                                                                   | 9,428.54                | 6,059                        | 6,883                         | 2,546                          | 17.52               | 145                      |
| 1989                                                                   | 9,423.51                | 5,921                        | 6,726                         | 2,698                          | 18.04               | 150                      |
| 1990                                                                   | 45,343.53               | 27,823                       | 31,605                        | 13,739                         | 18.58               | 739                      |
| 1991                                                                   | 16,302.22               | 9,757                        | 11,083                        | 5,219                          | 19.12               | 273                      |
|                                                                        | 120,070.46              | 78,645                       | 89,335                        | 30,735                         |                     | 1,795                    |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 17.1 1.49 |                         |                              |                               |                                |                     |                          |



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, 2019

| YEAR<br>(1)                                                       | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. 20-SQUARE                                        |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                           |                         |                              |                               |                                |                     |                          |
| 2000                                                              | 95,723.34               | 93,330                       | 95,723                        |                                |                     |                          |
| 2001                                                              | 173,686.96              | 160,660                      | 171,881                       | 1,806                          | 1.50                | 1,204                    |
| 2002                                                              | 94,356.55               | 82,562                       | 88,328                        | 6,029                          | 2.50                | 2,412                    |
| 2003                                                              | 96,741.60               | 79,812                       | 85,386                        | 11,356                         | 3.50                | 3,245                    |
| 2004                                                              | 31,580.89               | 24,475                       | 26,184                        | 5,397                          | 4.50                | 1,199                    |
| 2005                                                              | 522.52                  | 379                          | 405                           | 118                            | 5.50                | 21                       |
| 2007                                                              | 4,181.56                | 2,613                        | 2,796                         | 1,386                          | 7.50                | 185                      |
| 2010                                                              | 7,734.00                | 3,674                        | 3,931                         | 3,803                          | 10.50               | 362                      |
| 2011                                                              | 12,031.56               | 5,113                        | 5,470                         | 6,562                          | 11.50               | 571                      |
| 2012                                                              | 1,550.11                | 581                          | 622                           | 928                            | 12.50               | 74                       |
| 2014                                                              | 565,919.21              | 155,628                      | 166,498                       | 399,421                        | 14.50               | 27,546                   |
| 2015                                                              | 1,175,148.72            | 264,408                      | 282,875                       | 892,274                        | 15.50               | 57,566                   |
| 2016                                                              | 113,113.73              | 19,795                       | 21,177                        | 91,937                         | 16.50               | 5,572                    |
| 2017                                                              | 14,623.69               | 1,858                        | 1,988                         | 12,636                         | 17.46               | 724                      |
|                                                                   | 2,386,914.44            | 894,888                      | 953,264                       | 1,433,650                      |                     | 100,681                  |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 14.2 |                         |                              |                               |                                |                     | 4.22                     |

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, 2019

| YEAR<br>(1)                | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. 15-SQUARE |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0    |                         |                              |                               |                                |                     |                          |
| 2011                       | 24,427.00               | 13,842                       | 14,469                        | 9,958                          | 6.50                | 1,532                    |
| 2015                       | 66,876.67               | 20,063                       | 20,971                        | 45,906                         | 10.50               | 4,372                    |
|                            | 91,303.67               | 33,905                       | 35,440                        | 55,864                         |                     | 5,904                    |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.5 6.47

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, 2019

| YEAR<br>(1)                                                      | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. 5-SQUARE                                        |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                          |                         |                              |                               |                                |                     |                          |
| 2015                                                             | 941,918.01              | 847,726                      | 789,582                       | 152,336                        | 0.50                | 152,336                  |
| 2016                                                             | 1,495,726.59            | 1,047,009                    | 975,196                       | 520,531                        | 1.50                | 347,021                  |
| 2017                                                             | 1,254,075.20            | 637,484                      | 593,760                       | 660,315                        | 2.46                | 268,421                  |
|                                                                  | 3,691,719.80            | 2,532,219                    | 2,358,538                     | 1,333,182                      |                     | 767,778                  |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 1.7 |                         |                              |                               |                                |                     | 20.80                    |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 392 TRANSPORTATION EQUIPMENT - TRAILERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>(1)                                                            | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|------------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. 15-SQUARE                                             |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                                |                         |                              |                               |                                |                     |                          |
| 2011                                                                   | 3,781.00                | 2,143                        | 881                           | 2,900                          | 6.50                | 446                      |
| 2012                                                                   | 14,849.79               | 7,425                        | 3,054                         | 11,796                         | 7.50                | 1,573                    |
| 2013                                                                   | 2,789.00                | 1,209                        | 497                           | 2,292                          | 8.50                | 270                      |
| 2015                                                                   | 4,197.10                | 1,259                        | 518                           | 3,679                          | 10.50               | 350                      |
|                                                                        | 25,616.89               | 12,036                       | 4,950                         | 20,667                         |                     | 2,639                    |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.8 10.30 |                         |                              |                               |                                |                     |                          |

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, 2019

| YEAR<br>(1)                | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. 25-SQUARE |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0    |                         |                              |                               |                                |                     |                          |
| 1995                       | 162,417.47              | 159,169                      | 160,929                       | 1,488                          | 0.50                | 1,488                    |
| 1996                       | 552,198.39              | 519,066                      | 524,806                       | 27,392                         | 1.50                | 18,261                   |
| 1997                       | 1,161,874.46            | 1,045,687                    | 1,057,251                     | 104,623                        | 2.50                | 41,849                   |
| 1998                       | 383,704.26              | 329,986                      | 333,635                       | 50,069                         | 3.50                | 14,305                   |
| 1999                       | 191,341.50              | 156,900                      | 158,635                       | 32,706                         | 4.50                | 7,268                    |
| 2000                       | 296,716.81              | 231,439                      | 233,998                       | 62,719                         | 5.50                | 11,403                   |
| 2001                       | 186,888.81              | 138,298                      | 139,827                       | 47,062                         | 6.50                | 7,240                    |
| 2002                       | 303,527.92              | 212,470                      | 214,820                       | 88,708                         | 7.50                | 11,828                   |
| 2003                       | 291,419.99              | 192,337                      | 194,464                       | 96,956                         | 8.50                | 11,407                   |
| 2004                       | 366,999.55              | 227,540                      | 230,056                       | 136,944                        | 9.50                | 14,415                   |
| 2005                       | 79,725.36               | 46,241                       | 46,752                        | 32,973                         | 10.50               | 3,140                    |
| 2006                       | 167,413.05              | 90,403                       | 91,403                        | 76,010                         | 11.50               | 6,610                    |
| 2007                       | 835,832.86              | 417,916                      | 422,538                       | 413,295                        | 12.50               | 33,064                   |
| 2008                       | 1,181,797.10            | 543,627                      | 549,639                       | 632,158                        | 13.50               | 46,827                   |
| 2009                       | 278,442.30              | 116,946                      | 118,239                       | 160,203                        | 14.50               | 11,048                   |
| 2010                       | 777,173.73              | 295,326                      | 298,592                       | 478,582                        | 15.50               | 30,876                   |
| 2011                       | 595,579.35              | 202,497                      | 204,736                       | 390,843                        | 16.50               | 23,687                   |
| 2012                       | 870,830.41              | 261,249                      | 264,138                       | 606,692                        | 17.50               | 34,668                   |
| 2013                       | 784,168.63              | 203,884                      | 206,139                       | 578,030                        | 18.50               | 31,245                   |
| 2014                       | 894,641.85              | 196,821                      | 198,998                       | 695,644                        | 19.50               | 35,674                   |
| 2015                       | 1,788,936.70            | 322,009                      | 325,570                       | 1,463,367                      | 20.50               | 71,384                   |
| 2016                       | 971,312.23              | 135,984                      | 137,488                       | 833,824                        | 21.50               | 38,783                   |
| 2017                       | 1,449,495.87            | 147,370                      | 149,000                       | 1,300,496                      | 22.46               | 57,903                   |
| 2018                       | 1,585,000.00            | 95,100                       | 96,151                        | 1,488,849                      | 23.50               | 63,355                   |
| 2019                       | 1,116,197.00            | 22,324                       | 22,571                        | 1,093,626                      | 24.50               | 44,638                   |
|                            | 17,273,635.60           | 6,310,589                    | 6,380,375                     | 10,893,261                     |                     | 672,366                  |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.2 3.89

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, 2019

| YEAR<br>(1) | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(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 | 1,135,468 | 1,135,468 |  |  |  |
| 1996 | 280,092.23   | 280,092   | 280,092   |  |  |  |
| 1998 | 98,401.65    | 96,050    | 98,402    |  |  |  |
| 1999 | 18,450.18    | 17,777    | 18,450    |  |  |  |
| 2001 | 80,747.15    | 75,434    | 80,747    |  |  |  |

|              |           |           |  |  |  |  |
|--------------|-----------|-----------|--|--|--|--|
| 1,953,497.84 | 1,945,160 | 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, 2019

| YEAR<br>(1)                                                  | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|--------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. 20-SQUARE                                   |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                      |                         |                              |                               |                                |                     |                          |
| 2000                                                         | 2,990.39                | 2,916                        | 2,674                         | 316                            | 0.50                | 316                      |
| 2002                                                         | 1,118.18                | 978                          | 897                           | 221                            | 2.50                | 88                       |
| 2011                                                         | 19,084.33               | 8,111                        | 7,437                         | 11,647                         | 11.50               | 1,013                    |
| 2015                                                         | 245,836.91              | 55,313                       | 50,714                        | 195,123                        | 15.50               | 12,589                   |
|                                                              | 269,029.81              | 67,318                       | 61,722                        | 207,308                        |                     | 14,006                   |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. |                         |                              |                               |                                |                     | 14.8 5.21                |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 396 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>(1)                                                           | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 13-L2                                           |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                               |                         |                              |                               |                                |                     |                          |
| 1990                                                                  | 14,666.07               | 14,062                       | 14,666                        |                                |                     |                          |
| 1991                                                                  | 70,212.28               | 66,835                       | 70,212                        |                                |                     |                          |
| 1992                                                                  | 7,619.70                | 7,208                        | 7,620                         |                                |                     |                          |
| 1993                                                                  | 2,619.06                | 2,457                        | 2,619                         |                                |                     |                          |
| 1994                                                                  | 45,419.28               | 42,158                       | 45,419                        |                                |                     |                          |
| 1995                                                                  | 9,638.80                | 8,856                        | 9,639                         |                                |                     |                          |
| 1997                                                                  | 945.49                  | 849                          | 945                           |                                |                     |                          |
| 1999                                                                  | 89,292.15               | 78,166                       | 88,236                        | 1,056                          | 2.92                | 362                      |
| 2000                                                                  | 424,416.34              | 365,804                      | 412,929                       | 11,487                         | 3.12                | 3,682                    |
| 2001                                                                  | 23,340.60               | 19,776                       | 22,324                        | 1,017                          | 3.33                | 305                      |
| 2002                                                                  | 21,599.55               | 17,992                       | 20,310                        | 1,290                          | 3.51                | 368                      |
| 2003                                                                  | 296,898.31              | 242,507                      | 273,748                       | 23,150                         | 3.70                | 6,257                    |
| 2011                                                                  | 25,036.41               | 15,705                       | 17,728                        | 7,308                          | 5.05                | 1,447                    |
| 2014                                                                  | 4,400.00                | 2,059                        | 2,324                         | 2,076                          | 6.25                | 332                      |
|                                                                       | 1,036,104.04            | 884,434                      | 988,719                       | 47,385                         |                     | 12,753                   |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 3.7 1.23 |                         |                              |                               |                                |                     |                          |



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 397.5 COMMUNICATION EQUIPMENT - TELEMETERING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>(1)                                                       | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 19-R2.5                                     |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                           |                         |                              |                               |                                |                     |                          |
| 1991                                                              | 124,013.16              | 117,341                      | 101,924                       | 22,089                         | 1.62                | 13,635                   |
| 1992                                                              | 99,227.42               | 93,055                       | 80,829                        | 18,398                         | 1.82                | 10,109                   |
| 1995                                                              | 8,125.74                | 7,386                        | 6,416                         | 1,710                          | 2.45                | 698                      |
| 1996                                                              | 92,642.47               | 83,165                       | 72,238                        | 20,404                         | 2.68                | 7,613                    |
| 1997                                                              | 56,378.27               | 49,850                       | 43,300                        | 13,078                         | 2.95                | 4,433                    |
| 1998                                                              | 5,044.13                | 4,381                        | 3,805                         | 1,239                          | 3.25                | 381                      |
| 1999                                                              | 79,517.58               | 67,654                       | 58,765                        | 20,753                         | 3.60                | 5,765                    |
| 2000                                                              | 222,286.67              | 184,654                      | 160,393                       | 61,894                         | 3.97                | 15,590                   |
| 2001                                                              | 102,522.96              | 83,074                       | 72,160                        | 30,363                         | 4.33                | 7,012                    |
| 2002                                                              | 94,937.23               | 74,602                       | 64,801                        | 30,136                         | 4.77                | 6,318                    |
| 2004                                                              | 2,750.59                | 2,004                        | 1,741                         | 1,010                          | 5.78                | 175                      |
| 2012                                                              | 1,357.89                | 564                          | 490                           | 868                            | 10.55               | 82                       |
| 2013                                                              | 23,685.67               | 8,683                        | 7,542                         | 16,144                         | 11.23               | 1,438                    |
| 2015                                                              | 51,022.42               | 13,480                       | 11,709                        | 39,313                         | 12.53               | 3,138                    |
| 2018                                                              | 1,959,782.70            | 186,963                      | 162,398                       | 1,797,385                      | 14.22               | 126,398                  |
| 2019                                                              | 1,383,801.00            | 46,911                       | 40,748                        | 1,343,053                      | 14.25               | 94,249                   |
|                                                                   | 4,307,095.90            | 1,023,767                    | 889,259                       | 3,417,837                      |                     | 297,034                  |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 11.5 |                         |                              |                               |                                |                     | 6.90                     |



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 398 MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

| YEAR<br>(1)                                                           | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------------------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. 15-SQUARE                                            |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                               |                         |                              |                               |                                |                     |                          |
| 2005                                                                  | 23,458.02               | 22,676                       | 22,261                        | 1,197                          | 0.50                | 1,197                    |
| 2006                                                                  | 8,228.13                | 7,405                        | 7,270                         | 958                            | 1.50                | 639                      |
| 2007                                                                  | 136.82                  | 114                          | 112                           | 25                             | 2.50                | 10                       |
| 2008                                                                  | 2,264.03                | 1,736                        | 1,704                         | 560                            | 3.50                | 160                      |
| 2009                                                                  | 11,311.50               | 7,918                        | 7,773                         | 3,538                          | 4.50                | 786                      |
| 2010                                                                  | 25,988.40               | 16,459                       | 16,158                        | 9,830                          | 5.50                | 1,787                    |
| 2011                                                                  | 41,741.60               | 23,654                       | 23,221                        | 18,521                         | 6.50                | 2,849                    |
| 2012                                                                  | 129,294.07              | 64,647                       | 63,465                        | 65,829                         | 7.50                | 8,777                    |
| 2013                                                                  | 14,421.00               | 6,249                        | 6,135                         | 8,286                          | 8.50                | 975                      |
| 2014                                                                  | 94,460.48               | 34,636                       | 34,003                        | 60,457                         | 9.50                | 6,364                    |
| 2015                                                                  | 389,797.34              | 116,939                      | 114,800                       | 274,997                        | 10.50               | 26,190                   |
| 2016                                                                  | 462,727.10              | 107,968                      | 105,993                       | 356,734                        | 11.50               | 31,020                   |
| 2017                                                                  | 8,370.44                | 1,418                        | 1,392                         | 6,978                          | 12.46               | 560                      |
|                                                                       | 1,212,198.93            | 411,819                      | 404,287                       | 807,912                        |                     | 81,314                   |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.9 6.71 |                         |                              |                               |                                |                     |                          |

---

## **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<br>RETIREMENTS | COST OF<br>REMOVAL | GROSS<br>SALVAGE | NET<br>SALVAGE |
|-----------------------|------------------------|--------------------|------------------|----------------|
| 2014 TRANSACTION YEAR |                        |                    |                  |                |
| 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                | 7,885,751.50           | 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              |                    |                  |                |
| 397.10                | 605,672.59             |                    |                  |                |
| 397.50                | 28,765.62              |                    |                  |                |
|                       | 15,972,226.14          | 6,493,117.87       |                  | 6,493,117.87-  |
| 2015 TRANSACTION YEAR |                        |                    |                  |                |
| 362.10                |                        | 56,875.48          |                  | 56,875.48-     |
| 374.40                | 15,753.17              | 2,713.76           |                  | 2,713.76-      |
| 375.34                | 28,538.10              | 14,909.72          |                  | 14,909.72-     |
| 375.70                |                        | 22,140.00          |                  | 22,140.00-     |
| 376.00                | 8,996,141.74           | 978,776.00         | 20,828.00        | 957,948.00-    |
| 378.00                | 306,255.48             | 104,647.11         |                  | 104,647.11-    |
| 380.00                | 4,918,094.66           | 2,926,513.18       |                  | 2,926,513.18-  |
| 381.00                | 370,041.70             |                    |                  |                |
| 382.00                | 144,324.79             |                    |                  |                |
| 383.00                | 13,105.34              |                    |                  |                |
| 385.00                | 197,819.03             | 27,745.87          |                  | 27,745.87-     |
| 387.40                | 26,673.61              | 1,060.39           |                  | 1,060.39-      |
| 392.00                | 12,904.19              |                    | 26,139.89        | 26,139.89      |
| 394.00                | 758,805.48             |                    |                  |                |
| 396.00                |                        |                    | 109,393.82       | 109,393.82     |
| 397.10                | 173,475.92             |                    |                  |                |
| 397.50                | 29,824.98              | 29,402.56          |                  | 29,402.56-     |
|                       | 15,991,758.19          | 4,164,784.07       | 156,361.71       | 4,008,422.36-  |

COLUMBIA GAS OF PENNSYLVANIA, INC.

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

| ACCT                  | REGULAR<br>RETIREMENTS | COST OF<br>REMOVAL | GROSS<br>SALVAGE | NET<br>SALVAGE |
|-----------------------|------------------------|--------------------|------------------|----------------|
| 2016 TRANSACTION YEAR |                        |                    |                  |                |
| 362.10                |                        | 27,770.30          |                  | 27,770.30-     |
| 374.20                | 7.02                   | 192.38             |                  | 192.38-        |
| 374.40                | 281.87                 | 17.13              |                  | 17.13-         |
| 375.34                | 72,407.95              | 26,961.80          |                  | 26,961.80-     |
| 375.70                | 9,328.45               |                    |                  |                |
| 376.00                | 8,479,913.68           | 1,131,099.09       | 3,855.00         | 1,127,244.09-  |
| 378.00                | 1,212,757.48           | 63,141.34          |                  | 63,141.34-     |
| 380.00                | 6,548,981.00           | 2,853,156.51       |                  | 2,853,156.51-  |
| 381.00                | 724,309.02             | 675.71             | 215,365.51       | 214,689.80     |
| 382.00                | 154,260.25             |                    |                  |                |
| 383.00                | 17,403.11              |                    |                  |                |
| 385.00                | 85,292.41              | 64,142.79          |                  | 64,142.79-     |
| 387.40                | 36,279.86              | 1,807.70           |                  | 1,807.70-      |
| 394.00                | 161,691.96             | 2,431.14           |                  | 2,431.14-      |
| 396.00                | 218,570.62             |                    | 52,454.60        | 52,454.60      |
| 397.10                | 168,830.82             |                    |                  |                |
| 397.50                | 14,631.27              |                    |                  |                |
|                       | 17,904,946.77          | 4,171,395.89       | 271,675.11       | 3,899,720.78-  |
| 2017 TRANSACTION YEAR |                        |                    |                  |                |
| 362.10                |                        | 56,417.81          |                  | 56,417.81-     |
| 374.20                | 8.89                   |                    |                  |                |
| 374.40                | 11,936.44              | 38,240.05          |                  | 38,240.05-     |
| 375.34                | 177,551.37             | 36,137.31          |                  | 36,137.31-     |
| 376.00                | 12,225,336.78          | 1,258,205.78       | 1,297.00         | 1,256,908.78-  |
| 378.00                | 649,171.93             | 247,333.58         |                  | 247,333.58-    |
| 379.10                | 889.59                 |                    |                  |                |
| 380.00                | 7,406,277.97           | 2,142,798.48       |                  | 2,142,798.48-  |
| 381.00                | 394,736.32             | 4,899.87           | 34,508.89        | 29,609.02      |
| 382.00                | 124,360.72             |                    |                  |                |
| 383.00                | 12,648.88              |                    |                  |                |
| 385.00                | 357,612.63             | 113,814.22         |                  | 113,814.22-    |
| 387.40                | 37,733.38              | 459.97             |                  | 459.97-        |
| 392.00                | 42,274.76              |                    |                  |                |
| 394.00                | 186,713.88             | 1,648.52           |                  | 1,648.52-      |
| 396.00                | 180,818.08             |                    |                  |                |
| 397.50                | 43,079.36              | 257.12             |                  | 257.12-        |
|                       | 21,851,150.98          | 3,900,212.71       | 35,805.89        | 3,864,406.82-  |

COLUMBIA GAS OF PENNSYLVANIA, INC.

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

| ACCT                  | REGULAR<br>RETIREMENTS | COST OF<br>REMOVAL | GROSS<br>SALVAGE | NET<br>SALVAGE |
|-----------------------|------------------------|--------------------|------------------|----------------|
| 2018 TRANSACTION YEAR |                        |                    |                  |                |
| 374.40                | 23,750.00              | 12,825.00          |                  | 12,825.00-     |
| 375.34                | 70,740.00              | 36,077.00          |                  | 36,077.00-     |
| 375.70                | 70,742.00              |                    |                  |                |
| 376.00                | 16,899,252.00          | 2,027,910.00       |                  | 2,027,910.00-  |
| 378.00                | 2,583,731.00           | 749,282.00         |                  | 749,282.00-    |
| 380.00                | 5,468,949.00           | 2,570,406.00       |                  | 2,570,406.00-  |
| 381.00                | 123,504.00             |                    | 13,585.00        | 13,585.00      |
| 382.00                | 259,613.00             |                    |                  |                |
| 383.00                | 66,501.00              |                    |                  |                |
| 385.00                | 127,778.00             | 35,778.00          |                  | 35,778.00-     |
| 394.00                | 413,416.69             |                    |                  |                |
| 397.50                | 186,674.00             | 39,202.00          |                  | 39,202.00-     |
|                       | 26,294,650.69          | 5,471,480.00       | 13,585.00        | 5,457,895.00-  |
| TOTAL                 | 98,014,732.77          | 24,200,990.54      | 477,427.71       | 23,723,562.83- |

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, 2018 and as of December 31, 2019.

COLUMBIA GAS OF PENNSYLVANIA, INC.

COMPARISON OF CALCULATED ACCRUED DEPRECIATION  
AND BOOK RESERVE AS OF NOVEMBER 30, 2018

| <u>DEPRECIABLE GROUP</u>         |                                        | <u>CALCULATED<br/>ACCRUED<br/>DEPRECIATION</u> | <u>BOOK<br/>RESERVE</u> |
|----------------------------------|----------------------------------------|------------------------------------------------|-------------------------|
| (1)                              |                                        | (2)                                            | (3)                     |
|                                  |                                        | \$                                             | \$                      |
| <b>DEPRECIABLE PLANT</b>         |                                        |                                                |                         |
| <b>UNDERGROUND STORAGE PLANT</b> |                                        |                                                |                         |
| 350.2                            | RIGHTS-OF-WAY                          | 1,692                                          | 1,931                   |
| 351                              | COMPRESSOR STATION STRUCTURES          | 1,771,141                                      | 1,569,157               |
|                                  | WELLS                                  |                                                |                         |
| 352.01                           | CONSTRUCTION                           | 701,001                                        | 799,118                 |
| 352.02                           | EQUIPMENT                              | 148,440                                        | 168,680                 |
|                                  | <i>TOTAL ACCOUNT 352</i>               | <u>849,441</u>                                 | <u>967,798</u>          |
| 352.1                            | STORAGE LEASEHOLDS AND RIGHTS          | 182,182                                        | 206,932                 |
| 353                              | LINES                                  | 346,756                                        | 399,543                 |
| 354                              | COMPRESSOR STATION EQUIPMENT           | 637,923                                        | 721,621                 |
| 355                              | MEASURING AND REGULATING EQUIPMENT     | <u>90,107</u>                                  | <u>104,477</u>          |
|                                  | <b>TOTAL UNDERGROUND STORAGE PLANT</b> | <b>3,879,242</b>                               | <b>3,971,459</b>        |
| <b>DISTRIBUTION PLANT</b>        |                                        |                                                |                         |
|                                  | LAND AND LAND RIGHTS                   |                                                |                         |
| 374.4                            | LAND RIGHTS                            | 743,389                                        | 687,983                 |
| 374.5                            | RIGHTS-OF-WAY                          | 1,572,572                                      | 1,682,111               |
|                                  | <i>TOTAL ACCOUNT 374</i>               | <u>2,315,961</u>                               | <u>2,370,094</u>        |
|                                  | STRUCTURES AND IMPROVEMENTS            |                                                |                         |
| 375.34                           | MEASURING AND REGULATING               | 1,444,925                                      | 1,248,218               |
| 375.6                            | INDUSTRIAL MEASURING AND REGULATING    | 57,809                                         | 75,358                  |
| 375.7                            | OTHER DISTRIBUTION SYSTEMS             |                                                |                         |
|                                  | DISTRIBUTION SYSTEM STRUCTURES         | 1,755,886                                      | 2,033,263               |
|                                  | OTHER BUILDINGS                        | 725,084                                        | 845,386                 |
|                                  | <i>TOTAL ACCOUNT 375.70</i>            | <u>2,480,970</u>                               | <u>2,878,649</u>        |
| 375.8                            | COMMUNICATION STRUCTURES               | <u>6,760</u>                                   | <u>7,198</u>            |
|                                  | <i>TOTAL ACCOUNT 375</i>               | <b>3,990,464</b>                               | <b>4,209,423</b>        |
| 376                              | MAINS                                  |                                                |                         |
|                                  | CAST IRON                              | 310,866                                        | 303,432                 |
|                                  | BARE STEEL                             | 47,679,611                                     | 55,523,356              |
|                                  | OTHER                                  | <u>222,363,663</u>                             | <u>176,305,558</u>      |
|                                  | <i>TOTAL ACCOUNT 376</i>               | <b>270,354,140</b>                             | <b>232,132,346</b>      |



COLUMBIA GAS OF PENNSYLVANIA, INC.

COMPARISON OF CALCULATED ACCRUED DEPRECIATION  
AND BOOK RESERVE AS OF NOVEMBER 30, 2018

|                      | DEPRECIABLE GROUP<br>(1)                                             | CALCULATED<br>ACCRUED<br>DEPRECIATION<br>(2)<br>\$ | BOOK<br>RESERVE<br>(3)<br>\$ |
|----------------------|----------------------------------------------------------------------|----------------------------------------------------|------------------------------|
| 378                  | MEASURING AND REGULATING EQUIPMENT - GENERAL                         | 12,782,956                                         | 9,954,585                    |
| 379.1                | MEASURING AND REGULATING EQUIPMENT - CITY GATE                       | 101,914                                            | 100,009                      |
| 380                  | SERVICES                                                             |                                                    |                              |
|                      | BARE STEEL                                                           | 613,922                                            | 607,028                      |
|                      | OTHER                                                                | 124,612,747                                        | 123,213,443                  |
|                      | <i>TOTAL ACCOUNT 380</i>                                             | 125,226,669                                        | 123,820,471                  |
| 381                  | METERS                                                               | 15,989,004                                         | 16,573,233                   |
| 381.1                | METERS - AMR                                                         | 12,004,489                                         | 12,001,395                   |
| 382                  | METER INSTALLATIONS                                                  | 12,265,273                                         | 12,964,052                   |
| 383                  | HOUSE REGULATORS                                                     | 3,451,718                                          | 4,091,972                    |
| 384                  | HOUSE REGULATOR INSTALLATIONS                                        | 2,297,507                                          | 3,071,294                    |
| 385                  | INDUSTRIAL MEASURING AND REGULATING EQUIPMENT -<br>OTHER THAN METERS | 3,250,604                                          | 2,818,868                    |
|                      | OTHER EQUIPMENT                                                      |                                                    |                              |
| 387                  | GENERAL                                                              | 75,766                                             | 79,693                       |
| 387.4                | CUSTOMER INFORMATION SERVICES                                        | 1,744,093                                          | 1,506,428                    |
| 387.5                | GPS EQUIPMENT                                                        | 959,538                                            | 773,743                      |
|                      | <i>TOTAL ACCOUNT 387</i>                                             | 2,779,397                                          | 2,359,864                    |
|                      | <b>TOTAL DISTRIBUTION PLANT</b>                                      | <b>466,810,096</b>                                 | <b>426,467,606</b>           |
| <b>GENERAL PLANT</b> |                                                                      |                                                    |                              |
| 390.1                | STRUCTURES AND IMPROVEMENTS - COMMUNICATIONS                         | 76,812                                             | 87,332                       |
|                      | OFFICE FURNITURE AND EQUIPMENT                                       |                                                    |                              |
| 391.1                | FURNITURE                                                            | 1,319,861                                          | 1,420,052                    |
| 391.11               | EQUIPMENT                                                            | 27,311                                             | 29,040                       |
| 391.12               | INFORMATION SYSTEMS                                                  | 2,367,415                                          | 2,102,160                    |
|                      | <i>TOTAL ACCOUNT 391</i>                                             | 3,714,587                                          | 3,551,252                    |
| 392                  | TRANSPORTATION EQUIPMENT - TRAILERS                                  | 42,706                                             | 38,313                       |
| 393                  | STORES EQUIPMENT                                                     | 13,435                                             | 13,435                       |
|                      | TOOLS, SHOP AND GARAGE EQUIPMENT                                     |                                                    |                              |
| 394                  | EQUIPMENT                                                            | 6,550,241                                          | 6,682,101                    |
| 394.12               | CNG FACILITIES                                                       | 1,938,815                                          | 1,953,286                    |
|                      | <i>TOTAL ACCOUNT 394</i>                                             | 8,489,056                                          | 8,635,387                    |
| 395                  | LABORATORY EQUIPMENT                                                 | 57,455                                             | 51,471                       |
| 396                  | POWER OPERATED EQUIPMENT                                             | 867,904                                            | 1,022,613                    |

COLUMBIA GAS OF PENNSYLVANIA, INC.

COMPARISON OF CALCULATED ACCRUED DEPRECIATION  
AND BOOK RESERVE AS OF NOVEMBER 30, 2018

| DEPRECIABLE GROUP                 |                                        | CALCULATED<br>ACCRUED<br>DEPRECIATION | BOOK<br>RESERVE    |
|-----------------------------------|----------------------------------------|---------------------------------------|--------------------|
| (1)                               |                                        | (2)                                   | (3)                |
|                                   |                                        | \$                                    | \$                 |
| 397.5                             | COMMUNICATION EQUIPMENT - TELEMETERING | 945,871                               | 772,129            |
| 398                               | MISCELLANEOUS EQUIPMENT                | 339,855                               | 330,994            |
| <b>TOTAL GENERAL PLANT</b>        |                                        | <b>14,547,681</b>                     | <b>14,502,926</b>  |
| <b>SUBTOTAL DEPRECIABLE PLANT</b> |                                        | <b>485,237,019</b>                    | <b>444,941,991</b> |
| <b>AMORTIZABLE PLANT</b>          |                                        |                                       |                    |
| 303                               | MISCELLANEOUS INTANGIBLE PLANT         | 12,805,243                            | 12,805,243         |
| 362.1                             | ENVIRONMENTAL REMEDIATION              | (190,733)                             | (190,733)          |
| 374.2                             | LAND, OTHER DISTRIBUTION SYSTEMS       | 179,509                               | 179,509            |
| 375.71                            | STRUCTURES AND IMPROVEMENTS - LEASED   | 1,149,715                             | 1,149,715          |
| <b>SUBTOTAL AMORTIZABLE PLANT</b> |                                        | <b>13,943,734</b>                     | <b>13,943,734</b>  |
| <b>TOTAL GAS PLANT</b>            |                                        | <b>499,180,753</b>                    | <b>458,885,725</b> |

COLUMBIA GAS OF PENNSYLVANIA, INC.

COMPARISON OF CALCULATED ACCRUED DEPRECIATION  
AND BOOK RESERVE AS OF DECEMBER 31, 2019

| <u>DEPRECIABLE GROUP</u>         |                                        | <u>CALCULATED<br/>ACCRUED<br/>DEPRECIATION</u> | <u>BOOK<br/>RESERVE</u> |
|----------------------------------|----------------------------------------|------------------------------------------------|-------------------------|
| (1)                              |                                        | (2)                                            | (3)                     |
|                                  |                                        | \$                                             | \$                      |
| <b>DEPRECIABLE PLANT</b>         |                                        |                                                |                         |
| <b>UNDERGROUND STORAGE PLANT</b> |                                        |                                                |                         |
| 350.2                            | RIGHTS-OF-WAY                          | 1,732                                          | 1,931                   |
| 351                              | COMPRESSOR STATION STRUCTURES          | 2,021,050                                      | 1,854,407               |
|                                  | WELLS                                  |                                                |                         |
| 352.01                           | CONSTRUCTION                           | 717,114                                        | 799,118                 |
| 352.02                           | EQUIPMENT                              | 151,394                                        | 168,680                 |
|                                  | <i>TOTAL ACCOUNT 352</i>               | <u>868,508</u>                                 | <u>967,798</u>          |
| 352.1                            | STORAGE LEASEHOLDS AND RIGHTS          | 186,247                                        | 206,932                 |
| 353                              | LINES                                  | 354,686                                        | 399,543                 |
| 354                              | COMPRESSOR STATION EQUIPMENT           | 674,348                                        | 745,510                 |
| 355                              | MEASURING AND REGULATING EQUIPMENT     | 92,224                                         | 104,477                 |
|                                  | <b>TOTAL UNDERGROUND STORAGE PLANT</b> | <b>4,198,795</b>                               | <b>4,280,598</b>        |
| <b>DISTRIBUTION PLANT</b>        |                                        |                                                |                         |
|                                  | LAND AND LAND RIGHTS                   |                                                |                         |
| 374.4                            | LAND RIGHTS                            | 780,927                                        | 718,506                 |
| 374.5                            | RIGHTS-OF-WAY                          | 1,611,910                                      | 1,723,948               |
|                                  | <i>TOTAL ACCOUNT 374</i>               | <u>2,392,837</u>                               | <u>2,442,454</u>        |
|                                  | STRUCTURES AND IMPROVEMENTS            |                                                |                         |
| 375.34                           | MEASURING AND REGULATING               | 1,527,499                                      | 1,349,381               |
| 375.6                            | INDUSTRIAL MEASURING AND REGULATING    | 58,657                                         | 75,984                  |
| 375.7                            | OTHER DISTRIBUTION SYSTEMS             |                                                |                         |
|                                  | DISTRIBUTION SYSTEM STRUCTURES         | 1,965,619                                      | 2,213,757               |
|                                  | OTHER BUILDINGS                        | 822,269                                        | 930,739                 |
|                                  | <i>TOTAL ACCOUNT 375.70</i>            | <u>2,787,888</u>                               | <u>3,144,496</u>        |
| 375.8                            | COMMUNICATION STRUCTURES               | 7,118                                          | 7,601                   |
|                                  | <i>TOTAL ACCOUNT 375</i>               | <b>4,381,162</b>                               | <b>4,577,462</b>        |
| 376                              | MAINS                                  |                                                |                         |
|                                  | CAST IRON                              | 252,032                                        | 237,129                 |
|                                  | BARE STEEL                             | 40,977,538                                     | 46,077,207              |
|                                  | OTHER                                  | 252,221,918                                    | 202,982,674             |
|                                  | <i>TOTAL ACCOUNT 376</i>               | <b>293,451,488</b>                             | <b>249,297,010</b>      |

COLUMBIA GAS OF PENNSYLVANIA, INC.

COMPARISON OF CALCULATED ACCRUED DEPRECIATION  
AND BOOK RESERVE AS OF DECEMBER 31, 2019

|                      | DEPRECIABLE GROUP<br>(1)                                             | CALCULATED<br>ACCRUED<br>DEPRECIATION<br>(2)<br>\$ | BOOK<br>RESERVE<br>(3)<br>\$ |
|----------------------|----------------------------------------------------------------------|----------------------------------------------------|------------------------------|
| 378                  | MEASURING AND REGULATING EQUIPMENT - GENERAL                         | 15,613,001                                         | 13,213,122                   |
| 379.1                | MEASURING AND REGULATING EQUIPMENT - CITY GATE                       | 104,095                                            | 104,131                      |
| 380                  | SERVICES                                                             |                                                    |                              |
|                      | BARE STEEL                                                           | 471,385                                            | 466,130                      |
|                      | OTHER                                                                | 136,725,900                                        | 135,201,627                  |
|                      | <i>TOTAL ACCOUNT 380</i>                                             | 137,197,285                                        | 135,667,757                  |
| 381                  | METERS                                                               | 16,720,397                                         | 17,411,447                   |
| 381.1                | METERS - AMR                                                         | 13,509,635                                         | 13,831,919                   |
| 382                  | METER INSTALLATIONS                                                  | 12,903,741                                         | 13,549,487                   |
| 383                  | HOUSE REGULATORS                                                     | 3,730,409                                          | 4,334,095                    |
| 384                  | HOUSE REGULATOR INSTALLATIONS                                        | 2,362,763                                          | 3,112,325                    |
| 385                  | INDUSTRIAL MEASURING AND REGULATING EQUIPMENT -<br>OTHER THAN METERS | 3,480,819                                          | 3,162,340                    |
|                      | OTHER EQUIPMENT                                                      |                                                    |                              |
| 387                  | GENERAL                                                              | 78,542                                             | 83,395                       |
| 387.4                | CUSTOMER INFORMATION SERVICES                                        | 2,108,118                                          | 1,956,608                    |
| 387.5                | GPS EQUIPMENT                                                        | 1,170,008                                          | 1,049,356                    |
|                      | <i>TOTAL ACCOUNT 387</i>                                             | 3,356,668                                          | 3,089,359                    |
|                      | <b>TOTAL DISTRIBUTION PLANT</b>                                      | <b>509,204,300</b>                                 | <b>463,792,908</b>           |
| <b>GENERAL PLANT</b> |                                                                      |                                                    |                              |
| 390.1                | STRUCTURES AND IMPROVEMENTS - COMMUNICATIONS                         | 78,645                                             | 89,335                       |
|                      | OFFICE FURNITURE AND EQUIPMENT                                       |                                                    |                              |
| 391.1                | FURNITURE                                                            | 894,888                                            | 953,264                      |
| 391.11               | EQUIPMENT                                                            | 33,905                                             | 35,440                       |
| 391.12               | INFORMATION SYSTEMS                                                  | 2,532,219                                          | 2,358,538                    |
|                      | <i>TOTAL ACCOUNT 391</i>                                             | 3,461,012                                          | 3,347,242                    |
| 392                  | TRANSPORTATION EQUIPMENT - TRAILERS                                  | 12,036                                             | 4,950                        |
|                      | TOOLS, SHOP AND GARAGE EQUIPMENT                                     |                                                    |                              |
| 394                  | EQUIPMENT                                                            | 6,310,589                                          | 6,380,375                    |
| 394.12               | CNG FACILITIES                                                       | 1,945,160                                          | 1,953,498                    |
|                      | <i>TOTAL ACCOUNT 394</i>                                             | 8,255,749                                          | 8,333,873                    |
| 395                  | LABORATORY EQUIPMENT                                                 | 67,318                                             | 61,722                       |
| 396                  | POWER OPERATED EQUIPMENT                                             | 884,434                                            | 988,719                      |

COLUMBIA GAS OF PENNSYLVANIA, INC.

COMPARISON OF CALCULATED ACCRUED DEPRECIATION  
AND BOOK RESERVE AS OF DECEMBER 31, 2019

| <u>DEPRECIABLE GROUP</u> |                                        | <u>CALCULATED<br/>ACCRUED<br/>DEPRECIATION</u> | <u>BOOK<br/>RESERVE</u> |
|--------------------------|----------------------------------------|------------------------------------------------|-------------------------|
| (1)                      |                                        | (2)                                            | (3)                     |
|                          |                                        | \$                                             | \$                      |
| 397.5                    | COMMUNICATION EQUIPMENT - TELEMETERING | 1,023,767                                      | 889,259                 |
| 398                      | MISCELLANEOUS EQUIPMENT                | 411,819                                        | 404,287                 |
|                          | <b>TOTAL GENERAL PLANT</b>             | <b>14,194,780</b>                              | <b>14,119,387</b>       |
|                          | <b>SUBTOTAL DEPRECIABLE PLANT</b>      | <b>527,597,875</b>                             | <b>482,192,893</b>      |
| <b>AMORTIZABLE PLANT</b> |                                        |                                                |                         |
| 303                      | MISCELLANEOUS INTANGIBLE PLANT         | 15,661,171                                     | 15,661,171              |
| 362.1                    | ENVIRONMENTAL REMEDIATION              | (59,461)                                       | (59,461)                |
| 374.2                    | LAND, OTHER DISTRIBUTION SYSTEMS       | 134,737                                        | 134,737                 |
| 375.71                   | STRUCTURES AND IMPROVEMENTS - LEASED   | 1,300,385                                      | 1,300,385               |
|                          | <b>SUBTOTAL AMORTIZABLE PLANT</b>      | <b>17,036,832</b>                              | <b>17,036,832</b>       |
|                          | <b>TOTAL GAS PLANT</b>                 | <b>544,634,707</b>                             | <b>499,229,725</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 Projected Future Test 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

| DEPRECIABLE GROUP                |                                     | SURVIVOR  | ORIGINAL COST     | BOOK        | FUTURE        | CALCULATED     |             | COMPOSITE   |
|----------------------------------|-------------------------------------|-----------|-------------------|-------------|---------------|----------------|-------------|-------------|
| (1)                              |                                     | CURVE     | AS OF             | RESERVE     | BOOK          | ANNUAL ACCRUAL |             | REMAINING   |
|                                  |                                     | (2)       | NOVEMBER 30, 2016 | (4)         | ACCURUALS     | AMOUNT         | RATE        | LIFE        |
|                                  |                                     |           | (3)               |             | (5)           | (6)            | (7)=(6)/(3) | (8)=(5)/(6) |
| <b>DEPRECIABLE PLANT</b>         |                                     |           |                   |             |               |                |             |             |
| <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 * | 3,190,888.99      | 1,067,831   | 2,123,058     | 250,718        | 7.86        | 8.5         |
| WELLS                            |                                     |           |                   |             |               |                |             |             |
| 352.01                           | CONSTRUCTION                        | SQUARE *  | 799,133.73        | 799,118     | 16            | 2              | -           | 8.0         |
| 352.02                           | EQUIPMENT                           | 45-S2.5 * | 168,679.67        | 168,680     | 0             | 0              | -           | -           |
| TOTAL ACCOUNT 352                |                                     |           | 967,813.40        | 967,798     | 16            | 2              |             |             |
| 352.1                            | STORAGE LEASEHOLDS AND RIGHTS       | SQUARE *  | 206,940.78        | 206,932     | 9             | 1              | -           | 8.6         |
| 353                              | LINES                               | 50-S1.5 * | 405,287.78        | 405,288     | 0             | 0              | -           | -           |
| 354                              | COMPRESSOR STATION EQUIPMENT        | 50-R2.5 * | 905,914.67        | 651,798     | 254,117       | 30,558         | 3.37        | 8.3         |
| 355                              | MEASURING AND REGULATING EQUIPMENT  | 37-R1.5 * | 123,010.01        | 123,010     | 0             | 0              | -           | -           |
| TOTAL UNDERGROUND STORAGE PLANT  |                                     |           | 5,801,787.71      | 3,424,588   | 2,377,201     | 281,279        | 4.85        |             |
| <b>DISTRIBUTION PLANT</b>        |                                     |           |                   |             |               |                |             |             |
| LAND AND LAND RIGHTS             |                                     |           |                   |             |               |                |             |             |
| 374.4                            | LAND RIGHTS                         | 65-R3     | 2,584,852.44      | 657,837     | 1,927,015     | 45,002         | 1.74        | 42.8        |
| 374.5                            | RIGHTS-OF-WAY                       | 75-S4     | 3,239,601.77      | 1,601,503   | 1,638,099     | 42,280         | 1.31        | 38.7        |
| TOTAL ACCOUNT 374                |                                     |           | 5,824,454.21      | 2,259,340   | 3,565,114     | 87,282         | 1.50        |             |
| STRUCTURES AND IMPROVEMENTS      |                                     |           |                   |             |               |                |             |             |
| 375.34                           | MEASURING AND REGULATING            | 60-R1.5   | 5,106,606.48      | 1,327,973   | 3,778,633     | 108,422        | 2.12        | 34.9        |
| 375.6                            | INDUSTRIAL MEASURING AND REGULATING | 50-R1.5   | 87,669.84         | 73,641      | 14,029        | 863            | 0.98        | 16.3        |
| 375.7                            | OTHER DISTRIBUTION SYSTEMS          | 90-R1 *   | 5,411,266.03      | 1,652,340   | 3,758,925     | 180,405        | 3.33        | 20.8        |
|                                  | DISTRIBUTION SYSTEM STRUCTURES      | 33-S1     | 2,164,341.48      | 679,824     | 1,484,517     | 70,105         | 3.24        | 21.2        |
|                                  | OTHER BUILDINGS                     |           | 7,575,607.51      | 2,332,164   | 5,243,442     | 250,510        | 3.31        |             |
| TOTAL ACCOUNT 375.70             |                                     |           |                   |             |               |                |             |             |
| 375.8                            | COMMUNICATION STRUCTURES            | 50-R2     | 16,515.17         | 6,508       | 10,007        | 331            | 2.00        | 30.2        |
| TOTAL ACCOUNT 375                |                                     |           | 12,786,399.00     | 3,740,286   | 9,046,111     | 360,126        | 2.82        |             |
| 376                              | MAINS                               |           |                   |             |               |                |             |             |
|                                  | CAST IRON                           | 72-R1.5 * | 476,305.21        | 366,588     | 109,717       | 14,445         | 3.03        | 7.6         |
|                                  | BARE STEEL                          | 72-R1.5 * | 61,677,994.11     | 45,089,901  | 16,588,093    | 1,948,603      | 3.16        | 8.5         |
|                                  | OTHER                               | 72-R1.5   | 1,190,847,065.69  | 149,078,343 | 1,041,768,723 | 23,702,002     | 1.99        | 44.0        |
| TOTAL ACCOUNT 376                |                                     |           | 1,253,001,365.01  | 194,534,832 | 1,058,466,533 | 25,665,050     | 2.05        |             |

**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<br>(1)                                             | SURVIVOR<br>CURVE<br>(2) | ORIGINAL COST<br>AS OF<br>NOVEMBER 30, 2016<br>(3) | BOOK<br>RESERVE<br>(4) | FUTURE<br>BOOK<br>ACCRUALS<br>(5) | CALCULATED<br>ANNUAL ACCRUAL |                     | COMPOSITE<br>REMAINING<br>LIFE<br>(8)=(5)/(6) |
|----------------------|----------------------------------------------------------------------|--------------------------|----------------------------------------------------|------------------------|-----------------------------------|------------------------------|---------------------|-----------------------------------------------|
|                      |                                                                      |                          |                                                    |                        |                                   | AMOUNT<br>(6)                | RATE<br>(7)=(6)/(3) |                                               |
| 378                  | MEASURING AND REGULATING EQUIPMENT - GENERAL                         | 45-R0.5                  | 44,038,416.69                                      | 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                  | 445,862,035.44                                     | 110,812,604            | 335,049,431                       | 12,660,859                   | 2.84                | 26.5                                          |
|                      | <b>TOTAL ACCOUNT 380</b>                                             |                          | 446,690,967.26                                     | 111,536,567            | 335,154,400                       | 12,675,319                   | 2.84                |                                               |
| 381                  | METERS                                                               | 43-S1.5                  | 36,276,474.39                                      | 15,673,710             | 20,602,764                        | 889,711                      | 2.45                | 23.2                                          |
| 381.1                | METERS - AMR                                                         | 15-S2.5                  | 23,819,889.13                                      | 8,582,181              | 15,237,708                        | 1,753,958                    | 7.36                | 8.7                                           |
| 382                  | METER INSTALLATIONS                                                  | 55-R2.5                  | 36,358,561.47                                      | 11,909,425             | 24,449,136                        | 705,101                      | 1.94                | 34.7                                          |
| 383                  | HOUSE REGULATORS                                                     | 40-S2                    | 11,380,334.58                                      | 3,567,106              | 7,813,229                         | 294,343                      | 2.59                | 26.5                                          |
| 384                  | HOUSE REGULATOR INSTALLATIONS                                        | 35-S3                    | 3,864,772.07                                       | 2,972,034              | 892,738                           | 66,770                       | 1.73                | 13.4                                          |
| 385                  | INDUSTRIAL MEASURING AND REGULATING EQUIPMENT -<br>OTHER THAN METERS | 30-R0.5                  | 6,410,163.24                                       | 2,981,725              | 3,428,438                         | 242,202                      | 3.78                | 14.2                                          |
|                      | OTHER EQUIPMENT                                                      |                          |                                                    |                        |                                   |                              |                     |                                               |
| 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                    | 2,805,486.00                                       | 363,074                | 2,442,412                         | 329,884                      | 11.76               | 7.4                                           |
|                      | <b>TOTAL ACCOUNT 387</b>                                             |                          | 7,273,680.17                                       | 1,277,653              | 5,996,027                         | 547,683                      | 7.53                |                                               |
|                      | <b>TOTAL DISTRIBUTION PLANT</b>                                      |                          | <b>1,887,866,594.32</b>                            | <b>369,148,196</b>     | <b>1,518,718,395</b>              | <b>44,720,258</b>            | <b>2.37</b>         |                                               |
| <b>GENERAL PLANT</b> |                                                                      |                          |                                                    |                        |                                   |                              |                     |                                               |
| 390.1                | STRUCTURES AND IMPROVEMENTS - COMMUNICATIONS                         | 40-R2.5                  | 120,070.46                                         | 85,422                 | 34,648                            | 2,517                        | 2.10                | 13.8                                          |
|                      | OFFICE FURNITURE AND EQUIPMENT                                       |                          |                                                    |                        |                                   |                              |                     |                                               |
| 391.1                | 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                                           |
|                      | <b>TOTAL ACCOUNT 391</b>                                             |                          | 7,221,354.42                                       | 4,325,979              | 2,895,376                         | 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                            | -                   | -                                             |
|                      | TOOLS, SHOP AND GARAGE EQUIPMENT                                     |                          |                                                    |                        |                                   |                              |                     |                                               |
| 394                  | EQUIPMENT                                                            | 25-SQ                    | 14,131,844.50                                      | 5,797,220              | 8,334,624                         | 526,701                      | 3.73                | 15.8                                          |
| 394.12               | CNG FACILITIES                                                       | 12-S1.5                  | 1,953,497.84                                       | 1,953,286              | 212                               | 102                          | 0.01                | 2.1                                           |
|                      | <b>TOTAL ACCOUNT 394</b>                                             |                          | 16,085,342.34                                      | 7,750,506              | 8,334,836                         | 526,803                      | 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 |                                      | SURVIVOR<br>CURVE | ORIGINAL COST<br>AS OF<br>NOVEMBER 30, 2016 | BOOK<br>RESERVE | FUTURE<br>BOOK<br>ACCRUALS | CALCULATED<br>ANNUAL ACCRUAL |             | COMPOSITE<br>REMAINING<br>LIFE |
|-------------------|--------------------------------------|-------------------|---------------------------------------------|-----------------|----------------------------|------------------------------|-------------|--------------------------------|
| (1)               | (2)                                  | (3)               | (4)                                         | (5)             | (6)                        | (7)=(6)/(3)                  | (8)=(5)/(6) |                                |
| 395               | LABORATORY EQUIPMENT                 | 20-SQ             | 50,660.92                                   | 35,023          | 15,638                     | 1,797                        | 3.55        | 8.7                            |
| 396               | POWER OPERATED EQUIPMENT             | 12-L3             | 1,435,492.74                                | 1,367,642       | 67,851                     | 21,455                       | 1.49        | 3.2                            |
|                   | COMMUNICATION EQUIPMENT              |                   |                                             |                 |                            |                              |             |                                |
| 397.1             | TELEPHONE                            | 10-SQ             | 168,830.82                                  | 163,625         | 5,206                      | 0                            | -           | -                              |
| 397.5             | TELEMETERING                         | 17-R3             | 1,991,310.60                                | 884,202         | 1,107,109                  | 221,000                      | 11.10       | 5.0                            |
|                   | TOTAL ACCOUNT 397                    |                   | 2,160,141.42                                | 1,047,827       | 1,112,315                  | 221,000                      | 10.23       |                                |
| 398               | 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                    | 4.66        |                                |
|                   | 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     |                   | 477,118.40                                  | 179,478         |                            |                              |             |                                |
| 375.71            | STRUCTURES AND IMPROVEMENTS - LEASED |                   | 4,131,521.17                                | 740,882         | 3,390,639                  | 348,174                      | **          |                                |
|                   | SUBTOTAL AMORTIZABLE PLANT           |                   | 30,441,051.22                               | 7,987,822       | 20,469,135                 | 3,403,227                    |             |                                |
|                   | NONDEPRECIABLE PLANT                 |                   | 172,413.08                                  |                 |                            |                              |             |                                |
|                   | TOTAL GAS PLANT                      |                   | 1,952,329,636.61                            | 395,442,217     | 1,554,730,912              | 49,710,699                   |             |                                |

\* 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, 2017**

| DEPRECIABLE GROUP                |                                        | SURVIVOR  | ORIGINAL COST       | BOOK             | FUTURE           | CALCULATED     |             | COMPOSITE   |
|----------------------------------|----------------------------------------|-----------|---------------------|------------------|------------------|----------------|-------------|-------------|
|                                  |                                        | CURVE     | AS OF               | RESERVE          | BOOK             | ANNUAL ACCRUAL |             | REMAINING   |
| (1)                              |                                        | (2)       | DECEMBER 31, 2017   | (4)              | ACCRUALS         | AMOUNT         | RATE        | LIFE        |
|                                  |                                        |           | (3)                 |                  | (5)              | (6)            | (7)=(6)/(3) | (8)=(5)/(6) |
| <b>DEPRECIABLE PLANT</b>         |                                        |           |                     |                  |                  |                |             |             |
| <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 * | 3,190,888.99        | 1,339,667        | 1,851,222        | 249,574        | 7.82        | 7.4         |
| WELLS                            |                                        |           |                     |                  |                  |                |             |             |
| 352.01                           | CONSTRUCTION                           | SQUARE *  | 799,133.73          | 799,118          | 16               | 2              | -           | 8.0         |
| 352.02                           | EQUIPMENT                              | 45-S2.5 * | 168,679.67          | 168,680          | 0                | 0              | -           | -           |
|                                  | TOTAL ACCOUNT 352                      |           | 967,813.40          | 967,798          | 16               | 2              |             |             |
| 352.1                            | STORAGE LEASEHOLDS AND RIGHTS          | SQUARE *  | 206,940.78          | 206,932          | 9                | 1              | -           | 7.5         |
| 353                              | LINES                                  | 50-S1.5 * | 405,287.78          | 405,288          | 0                | 0              | -           | -           |
| 354                              | COMPRESSOR STATION EQUIPMENT           | 50-R2.5 * | 962,284.67          | 680,325          | 281,960          | 38,677         | 4.02        | 7.3         |
| 355                              | MEASURING AND REGULATING EQUIPMENT     | 37-R1.5 * | 123,010.01          | 123,010          | 0                | 0              | -           | -           |
|                                  | <b>TOTAL UNDERGROUND STORAGE PLANT</b> |           | <b>5,858,157.71</b> | <b>3,724,951</b> | <b>2,133,208</b> | <b>288,254</b> | <b>4.92</b> |             |
| <b>DISTRIBUTION PLANT</b>        |                                        |           |                     |                  |                  |                |             |             |
| LAND AND LAND RIGHTS             |                                        |           |                     |                  |                  |                |             |             |
| 374.4                            | LAND RIGHTS                            | 65-R3     | 2,832,646.44        | 683,587          | 2,149,059        | 49,497         | 1.75        | 43.4        |
| 374.5                            | RIGHTS-OF-WAY                          | 75-S4     | 3,239,601.77        | 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        |             |
| STRUCTURES AND IMPROVEMENTS      |                                        |           |                     |                  |                  |                |             |             |
| 375.34                           | MEASURING AND REGULATING               | 60-R1.5   | 5,530,327.48        | 1,406,360        | 4,123,967        | 117,792        | 2.13        | 35.0        |
| 375.6                            | INDUSTRIAL MEASURING AND REGULATING    | 50-R1.5   | 87,669.84           | 74,808           | 12,862           | 806            | 0.92        | 16.0        |
| 375.7                            | OTHER DISTRIBUTION SYSTEMS             |           |                     |                  |                  |                |             |             |
|                                  | DISTRIBUTION SYSTEM STRUCTURES         | 90-R1 *   | 5,534,263.03        | 1,842,427        | 3,691,835        | 179,755        | 3.25        | 20.5        |
|                                  | OTHER BUILDINGS                        | 33-S1     | 2,287,338.48        | 745,406          | 1,541,932        | 74,160         | 3.24        | 20.8        |
|                                  | TOTAL ACCOUNT 375.70                   |           | 7,821,601.51        | 2,587,833        | 5,233,767        | 253,915        | 3.25        |             |
| 375.8                            | COMMUNICATION STRUCTURES               | 50-R2     | 16,515.17           | 6,866            | 9,649            | 326            | 1.97        | 29.6        |
|                                  | TOTAL ACCOUNT 375                      |           | 13,456,114.00       | 4,075,867        | 9,380,245        | 372,839        | 2.77        |             |
| 376                              | MAINS                                  |           |                     |                  |                  |                |             |             |
|                                  | CAST IRON                              | 72-R1.5 * | 412,816.21          | 316,848          | 95,968           | 14,024         | 3.40        | 6.8         |
|                                  | BARE STEEL                             | 72-R1.5 * | 53,098,418.11       | 39,002,735       | 14,095,683       | 1,865,970      | 3.51        | 7.6         |
|                                  | OTHER                                  | 72-R1.5   | 1,394,646,085.69    | 164,680,211      | 1,229,965,875    | 27,992,889     | 2.01        | 43.9        |
|                                  | TOTAL ACCOUNT 376                      |           | 1,448,157,320.01    | 203,999,794      | 1,244,157,526    | 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<br>(1)                                             | SURVIVOR<br>CURVE<br>(2) | ORIGINAL COST<br>AS OF<br>DECEMBER 31, 2017<br>(3) | BOOK<br>RESERVE<br>(4) | FUTURE<br>BOOK<br>ACCRUALS<br>(5) | CALCULATED<br>ANNUAL ACCRUAL |                     | COMPOSITE<br>REMAINING<br>LIFE<br>(8)=(5)/(6) |
|----------------------|----------------------------------------------------------------------|--------------------------|----------------------------------------------------|------------------------|-----------------------------------|------------------------------|---------------------|-----------------------------------------------|
|                      |                                                                      |                          |                                                    |                        |                                   | AMOUNT<br>(6)                | RATE<br>(7)=(6)/(3) |                                               |
| 378                  | MEASURING AND REGULATING EQUIPMENT - GENERAL                         | 45-R0.5                  | 47,544,942.69                                      | 11,263,278             | 36,281,665                        | 1,515,802                    | 3.19                | 23.9                                          |
| 379.1                | 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 *                | 700,878.82                                         | 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                                          |
|                      | <b>TOTAL ACCOUNT 380</b>                                             |                          | 490,382,542.26                                     | 122,277,614            | 368,104,928                       | 13,907,317                   | 2.84                |                                               |
| 381                  | METERS                                                               | 43-S1.5                  | 37,714,613.39                                      | 16,508,949             | 21,205,664                        | 913,408                      | 2.42                | 23.2                                          |
| 381.1                | METERS - AMR                                                         | 15-S2.5                  | 24,289,053.13                                      | 10,448,842             | 13,840,211                        | 1,743,495                    | 7.18                | 7.9                                           |
| 382                  | METER INSTALLATIONS                                                  | 55-R2.5                  | 37,776,263.47                                      | 12,548,434             | 25,227,829                        | 732,417                      | 1.94                | 34.4                                          |
| 383                  | HOUSE REGULATORS                                                     | 40-S2                    | 12,047,373.58                                      | 3,829,549              | 8,217,825                         | 313,185                      | 2.60                | 26.2                                          |
| 384                  | HOUSE REGULATOR INSTALLATIONS                                        | 35-S3                    | 3,864,772.07                                       | 3,044,466              | 820,306                           | 64,393                       | 1.67                | 12.7                                          |
| 385                  | INDUSTRIAL MEASURING AND REGULATING EQUIPMENT -<br>OTHER THAN METERS | 30-R0.5                  | 6,572,464.24                                       | 3,265,874              | 3,306,590                         | 227,110                      | 3.46                | 14.6                                          |
|                      | OTHER EQUIPMENT                                                      |                          |                                                    |                        |                                   |                              |                     |                                               |
| 387                  | GENERAL                                                              | 30-R0.5                  | 133,851.06                                         | 79,896                 | 53,955                            | 3,371                        | 2.52                | 16.0                                          |
| 387.4                | CUSTOMER INFORMATION SERVICES                                        | 25-R2.5                  | 4,334,343.11                                       | 1,071,728              | 3,262,615                         | 204,012                      | 4.71                | 16.0                                          |
| 387.5                | GPS EQUIPMENT                                                        | 10-S3                    | 4,342,925.00                                       | 811,351                | 3,531,574                         | 490,955                      | 11.30               | 7.2                                           |
|                      | <b>TOTAL ACCOUNT 387</b>                                             |                          | 8,811,119.17                                       | 1,962,975              | 6,848,144                         | 698,338                      | 7.93                |                                               |
|                      | <b>TOTAL DISTRIBUTION PLANT</b>                                      |                          | 2,136,829,943.32                                   | 395,654,753            | 1,741,175,187                     | 50,456,754                   | 2.36                |                                               |
| <b>GENERAL PLANT</b> |                                                                      |                          |                                                    |                        |                                   |                              |                     |                                               |
| 390.1                | STRUCTURES AND IMPROVEMENTS - COMMUNICATIONS                         | 40-R2.5                  | 120,070.46                                         | 88,154                 | 31,916                            | 2,419                        | 2.01                | 13.2                                          |
|                      | OFFICE FURNITURE AND EQUIPMENT                                       |                          |                                                    |                        |                                   |                              |                     |                                               |
| 391.1                | FURNITURE                                                            | 20-SQ                    | 3,048,596.64                                       | 1,216,208              | 1,832,389                         | 142,003                      | 4.66                | 12.9                                          |
| 391.11               | EQUIPMENT                                                            | 15-SQ                    | 24,427.00                                          | 14,953                 | 9,474                             | 1,115                        | 4.56                | 8.5                                           |
| 391.12               | INFORMATION SYSTEMS                                                  | 5-SQ                     | 1,518,210.89                                       | 775,789                | 742,422                           | 388,111                      | 25.56               | 1.9                                           |
|                      | <b>TOTAL ACCOUNT 391</b>                                             |                          | 4,591,234.53                                       | 2,006,950              | 2,584,285                         | 531,229                      | 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                            | -                   | -                                             |
|                      | TOOLS, SHOP AND GARAGE EQUIPMENT                                     |                          |                                                    |                        |                                   |                              |                     |                                               |
| 394                  | EQUIPMENT                                                            | 25-SQ                    | 15,029,765.67                                      | 6,040,286              | 8,989,480                         | 568,047                      | 3.78                | 15.8                                          |
| 394.12               | CNG FACILITIES                                                       | 12-S1.5                  | 1,953,497.84                                       | 1,953,498              | 0                                 | 0                            | -                   | -                                             |
|                      | <b>TOTAL ACCOUNT 394</b>                                             |                          | 16,983,263.51                                      | 7,993,784              | 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                 |                                        | SURVIVOR<br>CURVE | ORIGINAL COST<br>AS OF<br>DECEMBER 31, 2017 | BOOK<br>RESERVE    | FUTURE<br>BOOK<br>ACCRUALS | CALCULATED<br>ANNUAL ACCRUAL |             | COMPOSITE<br>REMAINING<br>LIFE |
|-----------------------------------|----------------------------------------|-------------------|---------------------------------------------|--------------------|----------------------------|------------------------------|-------------|--------------------------------|
| (1)                               | (2)                                    | (3)               | (4)                                         | (5)                | (6)                        | (7)=(6)/(3)                  | (8)=(5)/(6) |                                |
| 395                               | LABORATORY EQUIPMENT                   | 20-SQ             | 27,903.14                                   | 13,685             | 14,218                     | 1,539                        | 5.52        | 9.2                            |
| 396                               | POWER OPERATED EQUIPMENT               | 12-L3             | 1,435,492.74                                | 1,367,406          | 68,087                     | 23,890                       | 1.66        | 2.9                            |
| 397.5                             | COMMUNICATION EQUIPMENT - TELEMETERING | 17-R3             | 3,242,485.60                                | 1,200,446          | 2,042,040                  | 191,377                      | 5.90        | 10.7                           |
| 398                               | MISCELLANEOUS EQUIPMENT                | 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>1,396,645</b>             | <b>5.10</b> |                                |
| <b>SUBTOTAL DEPRECIABLE PLANT</b> |                                        |                   | <b>2,170,061,285.16</b>                     | <b>412,329,456</b> | <b>1,757,731,829</b>       | <b>52,141,653</b>            | <b>2.40</b> |                                |
| <b>AMORTIZABLE PLANT</b>          |                                        |                   |                                             |                    |                            |                              |             |                                |
| 303                               | MISCELLANEOUS INTANGIBLE PLANT         |                   | 36,337,249.65                               | 9,799,828          | 26,537,422                 | 4,748,209                    | **          |                                |
| 362.1                             | ENVIRONMENTAL REMEDIATION              |                   |                                             | (2,266,471)        |                            |                              |             |                                |
| 374.2                             | LAND, OTHER DISTRIBUTION SYSTEMS       |                   | 477,118.40                                  | 146,190            |                            |                              |             |                                |
| 375.71                            | STRUCTURES AND IMPROVEMENTS - LEASED   |                   | 4,518,130.17                                | 1,080,296          | 3,437,834                  | 501,481                      | **          |                                |
| <b>SUBTOTAL AMORTIZABLE PLANT</b> |                                        |                   | <b>41,332,498.22</b>                        | <b>8,759,843</b>   | <b>29,975,256</b>          | <b>5,249,690</b>             |             |                                |
| <b>NONDEPRECIABLE PLANT</b>       |                                        |                   | <b>172,413.08</b>                           |                    |                            |                              |             |                                |
| <b>TOTAL GAS PLANT</b>            |                                        |                   | <b>2,211,566,196.46</b>                     | <b>421,089,299</b> | <b>1,787,707,085</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.

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 Projected Future Test 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 Projected Future Test 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, 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: C. H. Chen

COLUMBIA GAS OF PENNSYLVANIA, INC.  
ESTIMATED NUMBER OF BILLS AND NORMALIZED SALES VOLUMES  
TWELVE MONTHS ENDING November 30, 2018  
53.62

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

1  
Exhibit No.110  
Schedule No. 10  
Page 1 of 1  
Witness: C. H. Chen

COLUMBIA GAS OF PENNSYLVANIA. INC.  
FUTURE TEST YEAR SALES FORECAST  
TWELVE MONTHS ENDING NOVEMBER 30, 2018  
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). (Mays)

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

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

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. (Strauss)

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-2018-2647577  
WITNESS: M. P. BALMERT  
STUDY TYPE: CUSTOMER/DEMAND  
FORECASTED TEST YEAR: DECEMBER 31, 2019  
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, 2019

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1  
PAGE 1 OF 31  
WITNESS: M. P. BALMERT

| LINE<br>NO. | ACCOUNT TITLE<br>(A)                           | ALLOC<br>FACTOR<br>(B) | TOTAL<br>COMPANY<br>(C)<br>\$ | RSS/RDS<br>(D)<br>\$ | SGSS1/SCD1/SGDS1<br>(E)<br>\$ | SGSS2/SCD2/SGDS2<br>(F)<br>\$ | SDS/LGSS<br>(G)<br>\$ | LDS/LGSS<br>(H)<br>\$ | MLDS<br>(I)<br>\$ |
|-------------|------------------------------------------------|------------------------|-------------------------------|----------------------|-------------------------------|-------------------------------|-----------------------|-----------------------|-------------------|
| 1           | TOTAL REVENUE [PAGE 6]                         |                        | 622,285,201                   | 462,879,519          | 58,830,222                    | 55,531,943                    | 23,458,714            | 20,067,075            | 1,517,729         |
| 2           | PRODUCTS PURCHASED [PAGE 7]                    |                        | 163,506,936                   | 120,184,061          | 21,240,416                    | 18,646,735                    | 3,167,707             | 0                     | 268,017           |
| 3           | OPERATING & MAINTENANCE EXPENSES [PAGES 7 & 8] |                        | 191,576,058                   | 162,325,340          | 13,437,576                    | 7,332,736                     | 5,137,262             | 3,292,422             | 50,724            |
| 4           | DEPRECIATION & AMORTIZATION [PAGE 5]           |                        | 77,301,907                    | 61,208,325           | 6,748,742                     | 4,347,900                     | 2,970,502             | 1,983,120             | 43,319            |
| 5           | TAXES OTHER THAN INCOME [PAGE 9]               |                        | <u>3,456,803</u>              | <u>2,810,225</u>     | <u>301,916</u>                | <u>167,097</u>                | <u>102,868</u>        | <u>74,200</u>         | <u>497</u>        |
| 6           | TOTAL EXPENSES & TAXES OTHER THAN INCOME       |                        | 435,841,705                   | 346,527,951          | 41,728,649                    | 30,494,467                    | 11,378,338            | 5,349,742             | 362,556           |
| 7           | OPERATING INCOME BEFORE TAXES                  |                        | 186,443,497                   | 116,351,567          | 17,101,573                    | 25,037,476                    | 12,080,376            | 14,717,333            | 1,155,173         |
| 8           | INCOME TAXES                                   |                        | 31,547,473                    | 15,992,128           | 3,038,779                     | 5,934,583                     | 2,608,791             | 3,650,378             | 322,814           |
| 9           | INVESTMENT TAX CREDIT                          | 12                     | <u>(299,568)</u>              | <u>(237,213)</u>     | <u>(26,248)</u>               | <u>(17,186)</u>               | <u>(11,150)</u>       | <u>(7,633)</u>        | <u>(138)</u>      |
| 10          | NET INCOME TAXES                               |                        | 31,247,905                    | 15,754,915           | 3,012,531                     | 5,917,397                     | 2,597,641             | 3,642,745             | 322,676           |
| 11          | OPERATING INCOME                               |                        | 155,195,592                   | 100,596,652          | 14,089,042                    | 19,120,079                    | 9,482,735             | 11,074,588            | 832,497           |
| 12          | RATE BASE [PAGE 10]                            |                        | 1,915,996,457                 | 1,507,459,657        | 167,917,546                   | 115,061,757                   | 75,274,654            | 49,398,238            | 884,604           |
| 13          | RATE OF RETURN EARNED ON RATE BASE             |                        | 8.100%                        | 6.673%               | 8.390%                        | 16.617%                       | 12.598%               | 22.419%               | 94.110%           |
| 14          | UNITIZED RETURN                                |                        | 1.00                          | 0.82                 | 1.04                          | 2.05                          | 1.56                  | 2.77                  | 11.62             |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
RATE OF RETURN BY CLASS - CURRENT @ CURRENT RATES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1  
PAGE 2 OF 31  
WITNESS: M. P. BALMERT

| LINE<br>NO. | ACCOUNT TITLE<br>(A)                           | ALLOC<br>FACTOR<br>(B) | TOTAL<br>COMPANY<br>(C)<br>\$ | RSS/RDS<br>(D)<br>\$ | SGSS1/SCD1/SGDS1<br>(E)<br>\$ | SGSS2/SCD2/SGDS2<br>(F)<br>\$ | SDS/LGSS<br>(G)<br>\$ | LDS/LGSS<br>(H)<br>\$ | MLDS<br>(I)<br>\$ |
|-------------|------------------------------------------------|------------------------|-------------------------------|----------------------|-------------------------------|-------------------------------|-----------------------|-----------------------|-------------------|
| 1           | TOTAL REVENUE [PAGE 6]                         |                        | 575,348,119                   | 425,174,213          | 56,439,507                    | 53,365,902                    | 20,954,812            | 17,938,399            | 1,475,286         |
| 2           | PRODUCTS PURCHASED [PAGE 7]                    |                        | 163,506,936                   | 120,184,061          | 21,240,416                    | 18,646,735                    | 3,167,707             | 0                     | 268,017           |
| 3           | OPERATING & MAINTENANCE EXPENSES [PAGES 7 & 8] |                        | 191,017,256                   | 161,876,445          | 13,409,114                    | 7,306,948                     | 5,107,452             | 3,267,079             | 50,219            |
| 4           | DEPRECIATION & AMORTIZATION [PAGE 5]           |                        | 77,301,907                    | 61,208,325           | 6,748,742                     | 4,347,900                     | 2,970,502             | 1,983,120             | 43,319            |
| 5           | TAXES OTHER THAN INCOME [PAGE 9]               |                        | <u>3,456,803</u>              | <u>2,810,225</u>     | <u>301,916</u>                | <u>167,097</u>                | <u>102,868</u>        | <u>74,200</u>         | <u>497</u>        |
| 6           | TOTAL EXPENSES & TAXES OTHER THAN INCOME       |                        | 435,282,902                   | 346,079,057          | 41,700,187                    | 30,468,680                    | 11,348,528            | 5,324,399             | 362,051           |
| 7           | OPERATING INCOME BEFORE TAXES                  |                        | 140,065,217                   | 79,095,156           | 14,739,320                    | 22,897,222                    | 9,606,284             | 12,614,000            | 1,113,235         |
| 8           | INCOME TAXES [PAGE 11]                         |                        | 19,611,902                    | 6,404,094            | 2,430,847                     | 5,383,784                     | 1,972,077             | 3,109,079             | 312,021           |
| 9           | INVESTMENT TAX CREDIT                          | 12                     | <u>(299,568)</u>              | <u>(237,213)</u>     | <u>(26,248)</u>               | <u>(17,186)</u>               | <u>(11,150)</u>       | <u>(7,633)</u>        | <u>(138)</u>      |
| 10          | NET INCOME TAXES                               |                        | 19,312,334                    | 6,166,881            | 2,404,599                     | 5,366,597                     | 1,960,927             | 3,101,446             | 311,883           |
| 11          | OPERATING INCOME                               |                        | 120,752,883                   | 72,928,275           | 12,334,721                    | 17,530,625                    | 7,645,357             | 9,512,554             | 801,351           |
| 12          | RATE BASE [PAGE 10]                            |                        | 1,915,996,457                 | 1,507,459,657        | 167,917,546                   | 115,061,757                   | 75,274,654            | 49,398,238            | 884,604           |
| 13          | RATE OF RETURN EARNED ON RATE BASE             |                        | 6.302%                        | 4.838%               | 7.346%                        | 15.236%                       | 10.157%               | 19.257%               | 90.589%           |
| 14          | UNITIZED RETURN                                |                        | 1.00                          | 0.77                 | 1.17                          | 2.42                          | 1.61                  | 3.06                  | 14.37             |

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**GROSS PLANT (Accounts 101 & 106)**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019**

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1

PAGE 3 OF 31

WITNESS: M. P. BALMERT

| LINE NO.                  | ACCT. NO.<br>(A) | ACCOUNT TITLE<br>(B)                       | ALLOC FACTOR<br>(C) | TOTAL COMPANY<br>(D)<br>\$ | RSS/RDS<br>(E)<br>\$ | SGSS1/SCD1/SGDS1<br>(F)<br>\$ | SGSS2/SCD2/SGDS2<br>(G)<br>\$ | SDS/LGSS<br>(H)<br>\$ | LDS/LGSS<br>(I)<br>\$ | MLDS<br>(J)<br>\$ |
|---------------------------|------------------|--------------------------------------------|---------------------|----------------------------|----------------------|-------------------------------|-------------------------------|-----------------------|-----------------------|-------------------|
| 1                         | 301-305          | INTANGIBLE PLANT                           | 11                  | 42,397,572                 | 33,578,029           | 3,710,636                     | 2,428,109                     | 1,579,734             | 1,082,410             | 18,655            |
| 2                         | 301-305          | INTANGIBLE PLANT - C&I NETWORK ONLY        | 26                  | 1,612,791                  | 0                    | 0                             | 328,848                       | 1,039,734             | 217,614               | 26,595            |
| 3                         | 350-362          | UNDERGROUND STORAGE PLANT                  | 25                  | 5,856,461                  | 4,336,300            | 781,311                       | 633,259                       | 96,456                | 0                     | 9,136             |
| <b>DISTRIBUTION PLANT</b> |                  |                                            |                     |                            |                      |                               |                               |                       |                       |                   |
| 4                         | 374.10           | LAND - CITY GATE & M/L IND M&R             | 20                  | 21,944                     | 16,704               | 1,920                         | 1,538                         | 1,067                 | 715                   | 0                 |
| 5                         | 374.20           | LAND - OTHER DISTRIBUTION                  | 20                  | 477,102                    | 363,185              | 41,742                        | 33,435                        | 23,202                | 15,539                | 0                 |
| 6                         | 374.30           | LAND RIGHTS - CITY GATE MAIN LINE          | 20                  | 95,361                     | 72,592               | 8,343                         | 6,683                         | 4,637                 | 3,106                 | 0                 |
| 7                         | 374.40           | LAND RIGHTS - OTHER DISTRIBUTION           | 20                  | 3,032,712                  | 2,308,591            | 265,332                       | 212,533                       | 147,481               | 98,775                | 0                 |
| 8                         | 374.40           | DIRECT - LAND RIGHTS-OTHER DISTRIBUTION    | 0                   | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 9                         | 374.41           | LAND RIGHTS - OTHER DISTRIBUTION LOC       | 20                  | 13                         | 11                   | 1                             | 0                             | 0                     | 0                     | 0                 |
| 10                        | 374.50           | RIGHTS OF WAY                              | 20                  | 3,233,092                  | 2,461,127            | 282,863                       | 226,575                       | 157,225               | 105,302               | 0                 |
| 11                        | 374.50           | DIRECT - RIGHTS OF WAY                     | 51                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 51                |
| 12                        | 375.20           | M & R STRUCTURES - CITY GATE               | 20                  | 7,026                      | 5,349                | 615                           | 492                           | 342                   | 229                   | 0                 |
| 13                        | 375.31           | M & R STRUCTURES - LOCAL GAS PURCH         | 20                  | 4,012                      | 3,054                | 351                           | 281                           | 195                   | 131                   | 0                 |
| 14                        | 375.40           | M & R STRUCTURES - REGULATING              | 20                  | 4,752,758                  | 3,617,942            | 415,819                       | 333,073                       | 231,127               | 154,797               | 0                 |
| 15                        | 375.40           | DIRECT - M & R STRUCTURES - REGULATING     | 20                  | 30,949                     | 0                    | 0                             | 0                             | 0                     | 0                     | 30,949            |
| 16                        | 375.60           | M & R STRUCTURES - DIST. IND. M & R        | 17                  | 87,670                     | 0                    | 2,360                         | 15,052                        | 30,711                | 39,547                | 0                 |
| 17                        | 375.70           | M & R STRUCTURES - OTHER                   | 11                  | 9,600,426                  | 7,603,345            | 840,229                       | 549,816                       | 357,712               | 245,099               | 4,224             |
| 18                        | 375.71           | M & R STRUCTURES - OTHER LEASED            | 11                  | 5,092,381                  | 4,033,064            | 445,685                       | 291,641                       | 189,742               | 130,009               | 2,241             |
| 19                        | 375.80           | M & R STRUCTURES - COMMUNICATION           | 20                  | 16,515                     | 12,572               | 1,445                         | 1,157                         | 803                   | 538                   | 0                 |
| 20                        | 376.00           | MAINS                                      | 20                  | 1,713,900,920              | 1,304,672,797        | 149,949,192                   | 120,110,177                   | 83,347,002            | 55,821,753            | 0                 |
| 21                        | 376.00           | DIRECT - MAINS - MDS                       | 210,855             | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 210,855           |
| 22                        | 376.08           | MAINS-CSL REPLACEMENTS                     | 20                  | 23,760,169                 | 18,086,954           | 2,078,777                     | 1,665,113                     | 1,155,457             | 773,869               | 0                 |
| 23                        | 376.30           | MAINS-BARE STEEL                           | 20                  | 66,563,956                 | 50,670,481           | 5,823,681                     | 4,664,802                     | 3,237,005             | 2,167,988             | 0                 |
| 24                        | 376.30           | DIRECT - MAINS-BARE STEEL                  | 80,847              | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 80,847            |
| 25                        | 376.80           | MAINS-CAST IRON                            | 20                  | 400,795                    | 305,097              | 35,066                        | 28,088                        | 19,491                | 13,054                | 0                 |
| 26                        | 378.10           | M & R EQUIP - GENERAL                      | 20                  | 1,371,450                  | 1,043,989            | 119,988                       | 96,111                        | 66,694                | 44,668                | 0                 |
| 27                        | 378.20           | M & R EQUIP - GENERAL - REGULATING         | 20                  | 91,022,247                 | 69,288,865           | 7,963,536                     | 6,378,839                     | 4,426,412             | 2,964,595             | 0                 |
| 28                        | 378.20           | DIRECT - M & R EQUIP-GEN-REG               | 458,058             | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 458,058           |
| 29                        | 378.30           | M & R EQUIP - LOCAL GAS PURCHASES          | 20                  | 471,962                    | 359,272              | 41,292                        | 33,075                        | 22,952                | 15,372                | 0                 |
| 30                        | 379.10           | M & R EQUIP - CITY GATE                    | 20                  | 140,677                    | 107,088              | 12,308                        | 9,859                         | 6,841                 | 4,582                 | 0                 |
| 31                        | 379.11           | M & R EQUIP - EXCHANGE GAS                 | 20                  | (450)                      | (342)                | (39)                          | (32)                          | (22)                  | (15)                  | 0                 |
| 32                        | 380.00           | SERVICES                                   | 15                  | 592,415,097                | 538,191,343          | 45,213,120                    | 7,340,023                     | 1,084,120             | 586,491               | 0                 |
| 33                        | 380.00           | DIRECT - SERVICES                          | 1,966               | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 1,966             |
| 34                        | 380.12           | CSL REPLACEMENT                            | 15                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 35                        | 381.00           | METERS                                     | 16                  | 40,150,510                 | 30,222,493           | 6,466,841                     | 3,022,129                     | 339,272               | 94,755                | 5,220             |
| 36                        | 381.10           | AUTOMATIC METER READING                    | 16                  | 19,350,242                 | 14,565,508           | 3,116,550                     | 1,456,493                     | 163,510               | 45,667                | 2,516             |
| 37                        | 381.10           | AUTOMATIC METER READING - C&I NET ONLY     | 26                  | 4,600,627                  | 0                    | 0                             | 938,068                       | 2,965,932             | 620,763               | 75,864            |
| 38                        | 382.00           | METER INSTALLATIONS                        | 16                  | 43,214,952                 | 32,529,191           | 6,960,200                     | 3,252,789                     | 365,166               | 101,987               | 5,618             |
| 39                        | 383.00           | HOUSE REGULATORS                           | 21                  | 13,305,976                 | 12,060,802           | 1,018,173                     | 199,856                       | 22,221                | 4,391                 | 532               |
| 40                        | 384.00           | HOUSE REG INSTALLATIONS                    | 21                  | 3,864,772                  | 3,503,107            | 295,732                       | 58,049                        | 6,454                 | 1,275                 | 155               |
| 41                        | 385.00           | IND M&R EQUIPMENT                          | 17                  | 8,110,311                  | 0                    | 218,330                       | 1,392,459                     | 2,841,042             | 3,658,480             | 0                 |
| 42                        | 385.00           | DIRECT - IND M&R EQUIPMENT                 | 373,618             | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 373,618           |
| 43                        | 385.10           | IND M&R EQUIPMENT - LG VOLUME              | 17                  | 1,085,273                  | 0                    | 29,216                        | 186,331                       | 380,171               | 489,556               | 0                 |
| 44                        | 387.10           | OTHER EQUIP DISTRIBUTION                   | 11                  | 19,450                     | 15,404               | 1,702                         | 1,114                         | 725                   | 497                   | 9                 |
| 45                        | 387.20           | OTHER EQUIP ODORIZATION                    | 11                  | 117,248                    | 92,858               | 10,262                        | 6,715                         | 4,369                 | 2,993                 | 52                |
| 46                        | 387.42           | OTHER EQUIP RADIO                          | 11                  | 119,609                    | 94,728               | 10,468                        | 6,850                         | 4,457                 | 3,054                 | 53                |
| 47                        | 387.44           | OTHER EQUIP COMMUNICATION                  | 11                  | 627,109                    | 496,658              | 54,885                        | 35,915                        | 23,366                | 16,010                | 276               |
| 48                        | 387.46           | OTHER EQUIP CUSTOMER INFO SERVICE          | 11                  | 7,441,517                  | 5,893,532            | 651,282                       | 426,176                       | 277,271               | 189,982               | 3,274             |
| 49                        | 387.45           | DIRECT - OTHER EQUIP CUSTOMER INFO SERVICE | 39,788              | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 39,788            |
| 50                        | 387.50           | GPS EQUIPMENT                              | 11                  | 2,053,366                  | 1,626,225            | 179,711                       | 117,596                       | 76,508                | 52,422                | 904               |
| 51                        |                  | TOTAL DISTRIBUTION PLANT                   |                     | 2,661,724,931              | 2,104,323,585        | 232,556,776                   | 153,098,870                   | 101,980,657           | 68,467,975            | 1,297,067         |
| 52                        | 389-398          | GENERAL PLANT                              | 11                  | 31,812,773                 | 25,195,080           | 2,784,254                     | 1,821,918                     | 1,185,344             | 812,180               | 13,998            |
| 53                        |                  | TOTAL GROSS PLANT                          |                     | 2,741,791,737              | 2,167,432,993        | 239,832,976                   | 157,982,156                   | 104,842,191           | 70,362,565            | 1,338,856         |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
DEPRECIATION RESERVE  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

| 111, SCHEDULE 1           |               |                                            |                  |                   |             |                      |                      |              |              |          |
|---------------------------|---------------|--------------------------------------------|------------------|-------------------|-------------|----------------------|----------------------|--------------|--------------|----------|
| PAGE 4 OF 31              |               |                                            |                  |                   |             |                      |                      |              |              |          |
| 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                         | 301-305       | INTANGIBLE PLANT                           | 11               | 15,661,171        | 12,403,334  | 1,370,666            | 896,915              | 583,535      | 399,830      | 6,891    |
| 2                         | 301-305       | INTANGIBLE PLANT - C&I NETWORK ONLY        | 26               | 107,519           | 0           | 0                    | 21,923               | 69,315       | 14,508       | 1,773    |
| 3                         | 350-362       | UNDERGROUND STORAGE PLANT                  | 25               | 4,221,137         | 3,125,457   | 563,142              | 456,432              | 69,522       | 0            | 6,585    |
| <u>DISTRIBUTION PLANT</u> |               |                                            |                  |                   |             |                      |                      |              |              |          |
| 4                         | 374.10        | LAND - CITY GATE & M/L IND M&R             | 20               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |
| 5                         | 374.20        | LAND - OTHER DISTRIBUTION                  | 20               | 134,737           | 102,566     | 11,788               | 9,442                | 6,552        | 4,388        | 0        |
| 6                         | 374.30        | LAND RIGHTS - CITY GATE MAIN LINE          | 20               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |
| 7                         | 374.40        | LAND RIGHTS - OTHER DISTRIBUTION           | 20               | 718,506           | 546,948     | 62,862               | 50,353               | 34,941       | 23,402       | 0        |
| 8                         | 374.40        | DIRECT - LAND RIGHTS-OTHER DISTRIBUTION    | 20               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |
| 9                         | 374.41        | LAND RIGHTS - OTHER DISTRIBUTION LOC       | 20               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |
| 10                        | 374.50        | RIGHTS OF WAY                              | 20               | 1,723,916         | 1,312,297   | 150,825              | 120,812              | 83,834       | 56,148       | 0        |
| 11                        | 374.50        | DIRECT - RIGHTS OF WAY                     | 32               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 32       |
| 12                        | 375.20        | M & R STRUCTURES - CITY GATE               | 20               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |
| 13                        | 375.31        | M & R STRUCTURES - LOCAL GAS PURCH         | 20               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |
| 14                        | 375.40        | M & R STRUCTURES - REGULATING              | 20               | 1,344,493         | 1,023,468   | 117,630              | 94,222               | 65,383       | 43,790       | 0        |
| 15                        | 375.40        | DIRECT - M & R STRUCTURES - REGULATING     | 20               | 4,888             | 0           | 0                    | 0                    | 0            | 0            | 4,888    |
| 16                        | 375.60        | M & R STRUCTURES - DIST. IND. M & R        | 17               | 75,984            | 0           | 2,046                | 13,046               | 26,617       | 34,276       | 0        |
| 17                        | 375.70        | M & R STRUCTURES - OTHER                   | 11               | 3,144,496         | 2,490,378   | 275,206              | 180,085              | 117,164      | 80,279       | 1,384    |
| 18                        | 375.71        | M & R STRUCTURES - OTHER LEASED            | 11               | 1,300,385         | 1,029,879   | 113,810              | 74,473               | 48,452       | 33,199       | 572      |
| 19                        | 375.80        | M & R STRUCTURES - COMMUNICATION           | 20               | 7,601             | 5,786       | 665                  | 533                  | 370          | 248          | 0        |
| 20                        | 376.00        | MAINS                                      | 20               | 202,910,952       | 154,461,904 | 17,752,679           | 14,220,000           | 9,867,560    | 6,608,810    | 0        |
| 21                        | 376.00        | DIRECT - MAINS - MDS                       | 20               | 71,722            | 0           | 0                    | 0                    | 0            | 0            | 71,722   |
| 22                        | 376.08        | MAINS-CSL REPLACEMENTS                     | 20               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |
| 23                        | 376.30        | MAINS-BARE STEEL                           | 20               | 45,994,822        | 35,012,638  | 4,024,087            | 3,223,317            | 2,236,728    | 1,498,051    | 0        |
| 24                        | 376.30        | DIRECT - MAINS-BARE STEEL                  | 20               | 82,385            | 0           | 0                    | 0                    | 0            | 0            | 82,385   |
| 25                        | 376.80        | MAINS-CAST IRON                            | 20               | 237,129           | 180,510     | 20,746               | 16,618               | 11,532       | 7,723        | 0        |
| 26                        | 378.10        | M & R EQUIP - GENERAL                      | 20               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |
| 27                        | 378.20        | M & R EQUIP - GENERAL - REGULATING         | 20               | 13,158,592        | 10,016,715  | 1,151,245            | 922,154              | 639,902      | 428,575      | 0        |
| 28                        | 378.20        | DIRECT - M & R EQUIP-GEN-REG               | 20               | 54,530            | 0           | 0                    | 0                    | 0            | 0            | 54,530   |
| 29                        | 378.30        | M & R EQUIP - LOCAL GAS PURCHASES          | 20               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |
| 30                        | 379.10        | M & R EQUIP - CITY GATE                    | 20               | 104,131           | 79,268      | 9,110                | 7,298                | 5,064        | 3,392        | 0        |
| 31                        | 379.11        | M & R EQUIP - EXCHANGE GAS                 | 20               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |
| 32                        | 380.00        | SERVICES                                   | 15               | 135,665,837       | 123,248,343 | 10,354,017           | 1,680,900            | 248,269      | 134,309      | 0        |
| 33                        | 380.00        | DIRECT - SERVICES                          | 15               | 1,920             | 0           | 0                    | 0                    | 0            | 0            | 1,920    |
| 34                        | 380.12        | CSL REPLACEMENT                            | 15               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |
| 35                        | 381.00        | METERS                                     | 16               | 17,411,447        | 13,106,119  | 2,804,288            | 1,310,560            | 147,127      | 41,091       | 2,264    |
| 36                        | 381.10        | AUTOMATIC METER READING                    | 16               | 13,729,683        | 10,334,744  | 2,211,303            | 1,033,433            | 116,016      | 32,402       | 1,785    |
| 37                        | 381.10        | AUTOMATIC METER READING - C&I NET ONLY     | 26               | 102,236           | 0           | 0                    | 20,846               | 65,910       | 13,795       | 1,686    |
| 38                        | 382.00        | METER INSTALLATIONS                        | 16               | 13,549,487        | 10,199,105  | 2,182,280            | 1,019,870            | 114,493      | 31,977       | 1,761    |
| 39                        | 383.00        | HOUSE REGULATORS                           | 21               | 4,334,095         | 3,928,510   | 331,645              | 65,098               | 7,238        | 1,430        | 173      |
| 40                        | 384.00        | HOUSE REG INSTALLATIONS                    | 21               | 3,112,325         | 2,821,074   | 238,155              | 46,747               | 5,198        | 1,027        | 125      |
| 41                        | 385.00        | IND M&R EQUIPMENT                          | 17               | 3,051,516         | 0           | 82,147               | 523,915              | 1,068,946    | 1,376,508    | 0        |
| 42                        | 385.00        | DIRECT - IND M&R EQUIPMENT                 | 17               | 110,824           | 0           | 0                    | 0                    | 0            | 0            | 110,824  |
| 43                        | 385.10        | IND M&R EQUIPMENT - LG VOLUME              | 17               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |
| 44                        | 387.10        | OTHER EQUIP DISTRIBUTION                   | 11               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |
| 45                        | 387.20        | OTHER EQUIP ODORIZATION                    | 11               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |
| 46                        | 387.42        | OTHER EQUIP RADIO                          | 11               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |
| 47                        | 387.44        | OTHER EQUIP COMMUNICATION                  | 11               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |
| 48                        | 387.46        | OTHER EQUIP CUSTOMER INFO SERVICE          | 11               | 2,037,372         | 1,613,558   | 178,311              | 116,680              | 75,913       | 52,014       | 896      |
| 49                        | 387.45        | DIRECT - OTHER EQUIP CUSTOMER INFO SERVICE | 11               | 2,631             | 0           | 0                    | 0                    | 0            | 0            | 2,631    |
| 50                        | 387.50        | GPS EQUIPMENT                              | 11               | 1,049,356         | 831,069     | 91,840               | 60,097               | 39,099       | 26,790       | 462      |
| 51                        |               | TOTAL DISTRIBUTION PLANT                   |                  | 465,228,030       | 372,344,879 | 42,166,685           | 24,810,497           | 15,032,305   | 10,533,624   | 340,040  |
| 52                        | 389-398       | GENERAL PLANT                              | 11               | 14,119,387        | 11,182,272  | 1,235,729            | 808,617              | 526,088      | 360,468      | 6,213    |
| 53                        |               | TOTAL DEPRECIATION RESERVE                 |                  | 499,229,725       | 399,055,941 | 45,336,221           | 26,972,462           | 16,211,451   | 11,293,922   | 359,729  |



COLUMBIA GAS OF PENNSYLVANIA, INC.  
DEPRECIATION AND AMORTIZATION EXPENSE  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

| ALLOCATED COST OF SERVICE |               |                                             |                  |                   |             |                      |                      |              |              |          | 111, SCHEDULE 1        |
|---------------------------|---------------|---------------------------------------------|------------------|-------------------|-------------|----------------------|----------------------|--------------|--------------|----------|------------------------|
| CUSTOMER/DEMAND           |               |                                             |                  |                   |             |                      |                      |              |              |          | PAGE 5 OF 31           |
|                           |               |                                             |                  |                   |             |                      |                      |              |              |          | 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               | 4,872,321         | 3,858,781   | 426,426              | 279,038              | 181,543      | 124,390      | 2,144    |                        |
| 2                         | 301-305       | INTANGIBLE PLANT - C&I NETWORK ONLY         | 26               | 322,558           | (0)         | 0                    | 65,770               | 207,947      | 43,523       | 5,319    |                        |
| 3                         | 350-362       | UNDERGROUND STORAGE PLANT                   | 25               | 284,786           | 210,864     | 37,993               | 30,794               | 4,690        | 0            | 444      |                        |
|                           |               | <u>DISTRIBUTION PLANT</u>                   |                  |                   |             |                      |                      |              |              |          |                        |
| 4                         | 374.10        | LAND - CITY GATE & M/L IND M&R              | 20               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |                        |
| 5                         | 374.20        | LAND - OTHER DISTRIBUTION                   | 20               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |                        |
| 6                         | 374.30        | LAND RIGHTS - CITY GATE MAIN LINE           | 20               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |                        |
| 7                         | 374.40        | LAND RIGHTS - OTHER DISTRIBUTION            | 20               | 52,833            | 40,218      | 4,622                | 3,703                | 2,569        | 1,721        | 0        |                        |
| 8                         | 374.40        | DIRECT - LAND RIGHTS-OTHER DISTRIBUTION     | 20               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |                        |
| 9                         | 374.41        | LAND RIGHTS - OTHER DISTRIBUTION LOC        | 20               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |                        |
| 10                        | 374.50        | RIGHTS OF WAY                               | 20               | 35,298            | 26,870      | 3,088                | 2,474                | 1,717        | 1,150        | 0        |                        |
| 11                        | 374.50        | DIRECT - RIGHTS OF WAY                      | 20               | 1                 | 0           | 0                    | 0                    | 0            | 0            | 1        |                        |
| 12                        | 375.20        | M & R STRUCTURES - CITY GATE                | 20               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |                        |
| 13                        | 375.31        | M & R STRUCTURES - LOCAL GAS PURCH          | 20               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |                        |
| 14                        | 375.40        | M & R STRUCTURES - REGULATING               | 20               | 124,570           | 94,827      | 10,899               | 8,730                | 6,058        | 4,057        | 0        |                        |
| 15                        | 375.40        | DIRECT - M & R STRUCTURES - REGULATING      | 20               | 438               | 0           | 0                    | 0                    | 0            | 0            | 438      |                        |
| 16                        | 375.60        | M & R STRUCTURES - DIST. IND. M & R         | 17               | 545               | 0           | 15                   | 94                   | 191          | 246          | 0        |                        |
| 17                        | 375.70        | M & R STRUCTURES - OTHER                    | 11               | 313,877           | 248,584     | 27,471               | 17,976               | 11,695       | 8,013        | 138      |                        |
| 18                        | 375.71        | M & R STRUCTURES - OTHER LEASED             | 11               | 224,318           | 177,655     | 19,632               | 12,847               | 8,358        | 5,727        | 99       |                        |
| 19                        | 375.80        | M & R STRUCTURES - COMMUNICATION            | 20               | 365               | 278         | 32                   | 26                   | 18           | 12           | 0        |                        |
| 20                        | 376.00        | MAINS                                       | 20               | 38,572,693        | 29,362,691  | 3,374,725            | 2,703,174            | 1,875,790    | 1,256,313    | 0        |                        |
| 21                        | 376.00        | DIRECT - MAINS - MDS                        | 20               | 3,616             | 0           | 0                    | 0                    | 0            | 0            | 3,616    |                        |
| 22                        | 376.08        | MAINS-CSL REPLACEMENTS                      | 20               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |                        |
| 23                        | 376.30        | MAINS-BARE STEEL                            | 20               | 401,985           | 306,003     | 35,170               | 28,171               | 19,549       | 13,093       | 0        |                        |
| 24                        | 376.30        | DIRECT - MAINS-BARE STEEL                   | 20               | 2,622             | 0           | 0                    | 0                    | 0            | 0            | 2,622    |                        |
| 25                        | 376.80        | MAINS-CAST IRON                             | 20               | 6,932             | 5,277       | 607                  | 486                  | 337          | 226          | 0        |                        |
| 26                        | 378.10        | M & R EQUIP - GENERAL                       | 20               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |                        |
| 27                        | 378.20        | M & R EQUIP - GENERAL - REGULATING          | 20               | 3,603,117         | 2,742,801   | 315,237              | 252,507              | 175,220      | 117,354      | 0        |                        |
| 28                        | 378.20        | DIRECT - M & R EQUIP-GEN-REG                | 20               | 12,093            | 0           | 0                    | 0                    | 0            | 0            | 12,093   |                        |
| 29                        | 378.30        | M & R EQUIP - LOCAL GAS PURCHASES           | 20               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |                        |
| 30                        | 379.10        | M & R EQUIP - CITY GATE                     | 20               | 3,534             | 2,690       | 309                  | 248                  | 172          | 115          | 0        |                        |
| 31                        | 379.11        | M & R EQUIP - EXCHANGE GAS                  | 20               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |                        |
| 32                        | 380.00        | SERVICES                                    | 15               | 17,294,953        | 15,711,946  | 1,319,951            | 214,285              | 31,650       | 17,122       | 0        |                        |
| 33                        | 380.00        | DIRECT - SERVICES                           | 15               | 49                | 0           | 0                    | 0                    | 0            | 0            | 49       |                        |
| 34                        | 380.12        | CSL REPLACEMENT                             | 15               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |                        |
| 35                        | 381.00        | METERS                                      | 16               | 937,707           | 705,840     | 151,027              | 70,581               | 7,924        | 2,213        | 122      |                        |
| 36                        | 381.10        | AUTOMATIC METER READING                     | 16               | 1,297,423         | 976,609     | 208,963              | 97,657               | 10,963       | 3,062        | 169      |                        |
| 37                        | 381.10        | AUTOMATIC METER READING - C&I NET ONLY      | 26               | 306,708           | 0           | 0                    | 62,538               | 197,729      | 41,384       | 5,058    |                        |
| 38                        | 382.00        | METER INSTALLATIONS                         | 16               | 825,547           | 621,414     | 132,963              | 62,139               | 6,976        | 1,948        | 107      |                        |
| 39                        | 383.00        | HOUSE REGULATORS                            | 21               | 298,012           | 270,124     | 22,804               | 4,476                | 498          | 98           | 12       |                        |
| 40                        | 384.00        | HOUSE REG INSTALLATIONS                     | 21               | 37,255            | 33,769      | 2,851                | 560                  | 62           | 12           | 2        |                        |
| 41                        | 385.00        | IND M&R EQUIPMENT                           | 17               | 437,919           | 0           | 11,789               | 75,186               | 153,403      | 197,541      | 0        |                        |
| 42                        | 385.00        | DIRECT - IND M&R EQUIPMENT                  | 17               | 11,470            | 0           | 0                    | 0                    | 0            | 0            | 11,470   |                        |
| 43                        | 385.10        | IND M&R EQUIPMENT - LG VOLUME               | 17               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |                        |
| 44                        | 387.10        | OTHER EQUIP DISTRIBUTION                    | 11               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |                        |
| 45                        | 387.20        | OTHER EQUIP ODORIZATION                     | 11               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |                        |
| 46                        | 387.42        | OTHER EQUIP RADIO                           | 11               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |                        |
| 47                        | 387.44        | OTHER EQUIP COMMUNICATION                   | 11               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |                        |
| 48                        | 387.46        | OTHER EQUIP CUSTOMER INFO SERVICE           | 11               | 394,500           | 312,436     | 34,527               | 22,593               | 14,699       | 10,072       | 174      |                        |
| 49                        | 387.45        | DIRECT - OTHER EQUIP CUSTOMER INFO SERVICE  | 11               | 1,508             | 0           | 0                    | 0                    | 0            | 0            | 1,508    |                        |
| 50                        | 387.50        | GPS EQUIPMENT                               | 11               | 241,930           | 191,604     | 21,174               | 13,855               | 9,014        | 6,177        | 106      |                        |
| 51                        |               | TOTAL DISTRIBUTION PLANT                    |                  | 65,443,818        | 51,831,636  | 5,697,853            | 3,654,303            | 2,534,590    | 1,687,654    | 37,782   |                        |
| 53                        | 389-398       | GENERAL PLANT                               | 11               | 1,958,270         | 1,549,327   | 171,213              | 112,036              | 72,891       | 49,944       | 861      |                        |
| 54                        |               | NET DEPRECIATION & AMORTIZATION EXPENSE     |                  | 72,557,195        | 57,450,608  | 6,333,485            | 4,076,170            | 2,793,714    | 1,861,988    | 41,231   |                        |
| 55                        |               | AMORTIZATION OF NET NEGATIVE SALVAGE        | 11               | 4,744,713         | 3,757,718   | 415,257              | 271,730              | 176,788      | 121,133      | 2,088    |                        |
| 56                        |               | TOTAL AMORTIZATION AND DEPRECIATION EXPENSE |                  | 77,301,908        | 61,208,325  | 6,748,742            | 4,347,900            | 2,970,502    | 1,983,120    | 43,319   |                        |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
OPERATING REVENUE @ PROPOSED & CURRENT RATES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

| 111, SCHEDULE 1                   |          |                                  |              |               |             |                  |                  |            |            |           |
|-----------------------------------|----------|----------------------------------|--------------|---------------|-------------|------------------|------------------|------------|------------|-----------|
| PAGE 6 OF 31                      |          |                                  |              |               |             |                  |                  |            |            |           |
| 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)       |
|                                   |          |                                  |              | \$            | \$          | \$               | \$               | \$         | \$         | \$        |
| <u>PROPOSED OPERATING REVENUE</u> |          |                                  |              |               |             |                  |                  |            |            |           |
| SALES REVENUE                     |          |                                  |              |               |             |                  |                  |            |            |           |
| 1                                 | 480/481  | SALES BASE REVENUE               |              | 291,753,020   | 245,109,543 | 27,539,222       | 16,933,808       | 2,149,847  | 0          | 20,800    |
| 2                                 |          | C&I CHARGE REVENUE               |              | 2,558,065     | 0           | 0                | 521,588          | 1,649,136  | 345,159    | 42,182    |
| 3                                 |          | USP REVENUE                      |              | 25,010,607    | 25,010,607  | 0                | 0                | 0          | 0          | 0         |
| 4                                 |          | STAS REVENUE                     |              | 0             | 0           | 0                | 0                | 0          | 0          | 0         |
| 5                                 |          | RIDER CC - CUSTOMER CHOICE       |              | 33,856        | 24,988      | 4,813            | 4,055            | 0          | 0          | 0         |
| 6                                 |          | GAS PROCUREMENT REVENUE          |              | 2,581,692     | 1,912,126   | 334,502          | 281,823          | 53,241     | 0          | 0         |
| 7                                 |          | MERCHANT FUNCTION REVENUE        |              | 1,216,174     | 1,139,022   | 41,873           | 35,279           | 0          | 0          | 0         |
| 8                                 |          | GAS COST REVENUE                 |              | 153,873,118   | 113,767,356 | 19,902,150       | 16,767,888       | 3,167,707  | 0          | 268,017   |
| 9                                 |          | TOTAL SALES REVENUE              |              | 477,026,532   | 386,963,642 | 47,822,560       | 34,544,441       | 7,019,931  | 345,159    | 330,799   |
| TRANSPORTATION REVENUE            |          |                                  |              |               |             |                  |                  |            |            |           |
| 10                                | 489.00   | TRANSPORTATION BASE REVENUE      |              | 121,907,878   | 61,251,663  | 9,506,980        | 18,930,761       | 16,225,331 | 15,658,687 | 334,458   |
| 11                                |          | USP REVENUE                      |              | 6,931,233     | 6,931,233   | 0                | 0                | 0          | 0          | 0         |
| 12                                |          | STAS REVENUE                     |              | 0             | 0           | 0                | 0                | 0          | 0          | 0         |
| 13                                |          | RIDER CC - CUSTOMER CHOICE       |              | 13,321        | 6,925       | 1,643            | 4,753            | 0          | 0          | 0         |
| 14                                |          | FLEX REVENUE                     |              | 5,079,975     | 0           | 2,678            | 43,793           | 163,647    | 4,020,861  | 848,996   |
| 15                                |          | GAS COST REVENUE                 |              | 9,633,818     | 6,416,705   | 1,338,266        | 1,878,847        | 0          | 0          | 0         |
| 16                                |          | TOTAL TRANSPORTATION REVENUE     |              | 143,566,225   | 74,606,526  | 10,849,567       | 20,858,154       | 16,388,978 | 19,679,548 | 1,183,452 |
| MISCELLANEOUS REVENUE             |          |                                  |              |               |             |                  |                  |            |            |           |
| 17                                | 487.00   | FORFEITED DISCOUNTS              | 10           | 1,347,840     | 995,892     | 132,237          | 125,080          | 49,115     | 42,053     | 3,464     |
| 18                                | 488.00   | MISCELLANEOUS REVENUE            | 6            | 105,936       | 96,719      | 7,911            | 1,176            | 105        | 22         | 3         |
| 19                                | 493.00   | RENTS                            | 11           | 9,600         | 7,603       | 840              | 550              | 358        | 245        | 4         |
| 20                                | 495.00   | OTHER                            | 6            | 229,068       | 209,137     | 17,107           | 2,543            | 227        | 48         | 7         |
| 21                                |          | TOTAL MISCELLANEOUS REVENUE      |              | 1,692,444     | 1,309,351   | 158,095          | 129,348          | 49,805     | 42,368     | 3,478     |
| 22                                |          | TOTAL PROPOSED OPERATING REVENUE |              | 622,285,201   | 462,879,519 | 58,830,222       | 55,531,943       | 23,458,714 | 20,067,075 | 1,517,729 |
| <u>CURRENT OPERATING REVENUE</u>  |          |                                  |              |               |             |                  |                  |            |            |           |
| SALES REVENUE                     |          |                                  |              |               |             |                  |                  |            |            |           |
| 23                                | 480/481  | SALES BASE REVENUE               |              | 243,138,783   | 199,086,099 | 25,773,774       | 16,206,338       | 2,051,972  | 0          | 20,800    |
| 24                                |          | USP REVENUE                      |              | 22,946,588    | 22,946,588  | 0                | 0                | 0          | 0          | 0         |
| 25                                |          | STAS REVENUE                     |              | 0             | 0           | 0                | 0                | 0          | 0          | 0         |
| 26                                |          | RIDER CC - CUSTOMER CHOICE       |              | 33,856        | 24,988      | 4,813            | 4,055            | 0          | 0          | 0         |
| 27                                |          | GAS PROCUREMENT REVENUE          |              | 2,581,692     | 1,912,126   | 334,502          | 281,823          | 53,241     | 0          | 0         |
| 28                                |          | MERCHANT FUNCTION REVENUE        |              | 1,216,174     | 1,139,022   | 41,873           | 35,279           | 0          | 0          | 0         |
| 29                                |          | GAS COST REVENUE                 |              | 153,873,118   | 113,767,356 | 19,902,150       | 16,767,888       | 3,167,707  | 0          | 268,017   |
| 30                                |          | TOTAL SALES REVENUE              |              | 423,790,211   | 338,878,179 | 46,057,112       | 33,295,383       | 5,272,920  | 0          | 288,617   |
| TRANSPORTATION REVENUE            |          |                                  |              |               |             |                  |                  |            |            |           |
| 31                                | 489.00   | TRANSPORTATION BASE REVENUE      |              | 128,372,847   | 72,280,984  | 8,890,928        | 18,020,338       | 15,403,016 | 13,678,445 | 99,136    |
| 32                                |          | USP REVENUE                      |              | 6,359,228     | 6,359,228   | 0                | 0                | 0          | 0          | 0         |
| 33                                |          | STAS REVENUE                     |              | 0             | 0           | 0                | 0                | 0          | 0          | 0         |
| 34                                |          | RIDER CC - CUSTOMER CHOICE       |              | 13,321        | 6,925       | 1,643            | 4,753            | 0          | 0          | 0         |
| 35                                |          | FLEX REVENUE                     |              | 5,587,970     | 0           | 3,443            | 46,673           | 232,778    | 4,220,760  | 1,084,316 |
| 36                                |          | GAS COST REVENUE                 |              | 9,633,818     | 6,416,705   | 1,338,266        | 1,878,847        | 0          | 0          | 0         |
| 37                                |          | TOTAL TRANSPORTATION REVENUE     |              | 149,967,184   | 85,063,842  | 10,234,280       | 19,950,611       | 15,635,794 | 17,899,205 | 1,183,452 |
| MISCELLANEOUS REVENUE             |          |                                  |              |               |             |                  |                  |            |            |           |
| 38                                | 487.00   | FORFEITED DISCOUNTS              | 10           | 1,246,120     | 920,733     | 122,257          | 115,640          | 45,409     | 38,879     | 3,203     |
| 39                                | 488.00   | MISCELLANEOUS REVENUE            | 6            | 105,936       | 96,719      | 7,911            | 1,176            | 105        | 22         | 3         |
| 40                                | 493.00   | RENTS                            | 11           | 9,600         | 7,603       | 840              | 550              | 358        | 245        | 4         |
| 41                                | 495.00   | OTHER                            | 6            | 229,068       | 209,137     | 17,107           | 2,543            | 227        | 48         | 7         |
| 42                                |          | TOTAL MISCELLANEOUS REVENUE      |              | 1,590,724     | 1,234,192   | 148,115          | 119,908          | 46,098     | 39,194     | 3,217     |
| 43                                |          | TOTAL CURRENT OPERATING REVENUE  |              | 575,348,119   | 425,174,213 | 56,439,507       | 53,365,902       | 20,954,812 | 17,938,399 | 1,475,286 |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
PRODUCTION & DISTRIBUTION O&M EXPENSES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1

PAGE 7 OF 31

WITNESS: M. P. BALMERT

| LINE NO.                                        | ACCT NO.<br>(A) | ACCOUNT TITLE<br>(B)                   | ALLOC FACTOR<br>(C) | TOTAL COMPANY<br>(D)<br>\$ | RSS/RDS<br>(E)<br>\$ | SGSS1/SCD1/SGDS1<br>(F)<br>\$ | SGSS2/SCD2/SGDS2<br>(G)<br>\$ | SDS/LGSS<br>(H)<br>\$ | LDS/LGSS<br>(I)<br>\$ | MLDS<br>(J)<br>\$ |
|-------------------------------------------------|-----------------|----------------------------------------|---------------------|----------------------------|----------------------|-------------------------------|-------------------------------|-----------------------|-----------------------|-------------------|
| <u>PURCHASED GAS EXPENSES</u>                   |                 |                                        |                     |                            |                      |                               |                               |                       |                       |                   |
| 1                                               |                 | GAS PURCHASED COST                     |                     | 163,506,936                | 120,184,061          | 21,240,416                    | 18,646,735                    | 3,167,707             | 0                     | 268,017           |
| 2                                               | 807.00          | PURCHASED GAS EXPENSE                  | 4                   | (1,551,614)                | (1,140,498)          | (201,570)                     | (176,946)                     | (30,055)              | 0                     | (2,545)           |
| 3                                               | 807.00          | GAS PROCUREMENT EXPENSE                | 4                   | <u>2,581,692</u>           | <u>1,897,647</u>     | <u>335,388</u>                | <u>294,416</u>                | <u>50,007</u>         | <u>0</u>              | <u>4,234</u>      |
| 4                                               |                 | TOTAL PURCHASED GAS                    |                     | <u>164,537,014</u>         | <u>120,941,210</u>   | <u>21,374,233</u>             | <u>18,764,205</u>             | <u>3,187,660</u>      | <u>0</u>              | <u>269,706</u>    |
| <u>UNDERGROUND STORAGE OPERATIONS EXPENSES</u>  |                 |                                        |                     |                            |                      |                               |                               |                       |                       |                   |
| 5                                               | 816.00          | WELLS                                  | 25                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 6                                               | 817.00          | LINES                                  | 25                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 7                                               | 818.00          | COMPRESSOR STATION                     | 25                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 8                                               | 820.00          | M & R                                  | 25                  | 124,072                    | 91,867               | 16,552                        | 13,416                        | 2,044                 | 0                     | 194               |
| 9                                               | 821.00          | PURIFICATION                           | 25                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 10                                              | 823.00          | GAS LOSSES                             | 25                  | 1,322                      | 979                  | 176                           | 143                           | 22                    | 0                     | 2                 |
| 11                                              | 825.00          | STORAGE WELL ROYALTIES                 | 25                  | <u>5,199</u>               | <u>3,850</u>         | <u>694</u>                    | <u>562</u>                    | <u>86</u>             | <u>0</u>              | <u>8</u>          |
| 12                                              |                 | TOTAL UNDERGROUND STORAGE OPERATIONS   |                     | <u>130,593</u>             | <u>96,695</u>        | <u>17,422</u>                 | <u>14,121</u>                 | <u>2,151</u>          | <u>0</u>              | <u>204</u>        |
| <u>UNDERGROUND STORAGE MAINTENANCE EXPENSES</u> |                 |                                        |                     |                            |                      |                               |                               |                       |                       |                   |
| 13                                              | 832.00          | WELLS                                  | 25                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 14                                              | 834.00          | COMPRESSOR STATION                     | 25                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 15                                              | 836.00          | PURIFICATION                           | 25                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 16                                              | 840.00          | OTHER STORAGE - OPERATION SUPERV - ENG | 25                  | <u>0</u>                   | <u>0</u>             | <u>0</u>                      | <u>0</u>                      | <u>0</u>              | <u>0</u>              | <u>0</u>          |
| 16                                              |                 | TOTAL UNDERGROUND STORAGE MAINTENANCE  |                     | <u>0</u>                   | <u>0</u>             | <u>0</u>                      | <u>0</u>                      | <u>0</u>              | <u>0</u>              | <u>0</u>          |
| 17                                              |                 | TOTAL UNDERGROUND STORAGE              |                     | <u>130,593</u>             | <u>96,695</u>        | <u>17,422</u>                 | <u>14,121</u>                 | <u>2,151</u>          | <u>0</u>              | <u>204</u>        |
| <u>DISTRIBUTION OPERATIONS EXPENSES</u>         |                 |                                        |                     |                            |                      |                               |                               |                       |                       |                   |
| 18                                              | 870.00          | SUPERVISION & ENGINEERING              | 18                  | 8,084,222                  | 6,556,062            | 700,013                       | 395,884                       | 250,611               | 180,844               | 808               |
| 19                                              | 871.00          | LOAD DISPATCHING                       | 13                  | 160,895                    | 122,459              | 14,075                        | 11,274                        | 7,823                 | 5,239                 | 26                |
| 20                                              | 874.00          | MAINS & SERVICES                       | 14                  | 18,342,149                 | 14,628,231           | 1,553,947                     | 1,023,859                     | 679,760               | 454,152               | 2,201             |
| 21                                              | 875.00          | M & R - GENERAL                        | 13                  | 535,041                    | 407,225              | 46,805                        | 37,490                        | 26,014                | 17,421                | 86                |
| 22                                              | 876.00          | M & R - INDUSTRIAL                     | 17                  | 282,622                    | (0)                  | 7,608                         | 48,523                        | 99,003                | 127,488               | 0                 |
| 23                                              | 878.00          | METERS & HOUSE REGULATORS              | 23                  | 2,617,608                  | 2,027,966            | 389,893                       | 174,437                       | 19,580                | 5,418                 | 314               |
| 24                                              | 879.00          | CUSTOMER INSTALLATIONS                 | 15                  | 6,830,672                  | 6,205,461            | 521,317                       | 84,632                        | 12,500                | 6,762                 | 0                 |
| 25                                              | 880.00          | OTHER                                  | 18                  | 3,800,938                  | 3,082,447            | 329,123                       | 186,132                       | 117,829               | 85,027                | 380               |
| 26                                              | 881.00          | RENTS                                  | 18                  | <u>(27,695)</u>            | <u>(22,460)</u>      | <u>(2,398)</u>                | <u>(1,356)</u>                | <u>(859)</u>          | <u>(620)</u>          | <u>(3)</u>        |
| 27                                              |                 | TOTAL DISTRIBUTION OPERATIONS          |                     | <u>40,626,452</u>          | <u>33,007,389</u>    | <u>3,560,383</u>              | <u>1,960,876</u>              | <u>1,212,260</u>      | <u>881,732</u>        | <u>3,812</u>      |
| <u>DISTRIBUTION MAINTENANCE EXPENSES</u>        |                 |                                        |                     |                            |                      |                               |                               |                       |                       |                   |
| 28                                              | 885.00          | SUPERVISION & ENGINEERING              | 18                  | 138,648                    | 112,439              | 12,006                        | 6,790                         | 4,298                 | 3,102                 | 14                |
| 29                                              | 886.00          | STRUCTURES AND IMPROVEMENTS            | 13                  | 166,985                    | 127,094              | 14,608                        | 11,701                        | 8,119                 | 5,437                 | 27                |
| 30                                              | 887.00          | MAINS                                  | 13                  | 11,917,466                 | 9,070,503            | 1,042,540                     | 835,057                       | 579,427               | 388,033               | 1,907             |
| 31                                              | 889.00          | M & R - GENERAL                        | 13                  | 912,321                    | 694,377              | 79,810                        | 63,926                        | 44,357                | 29,705                | 146               |
| 32                                              | 890.00          | M & R - INDUSTRIAL                     | 17                  | 150,902                    | 0                    | 4,062                         | 25,908                        | 52,861                | 68,070                | 0                 |
| 33                                              | 892.00          | SERVICES                               | 15                  | 7,471,330                  | 6,787,479            | 570,212                       | 92,570                        | 13,673                | 7,397                 | 0                 |
| 34                                              | 893.00          | METERS & HOUSE REGULATORS              | 23                  | 505,241                    | 391,431              | 75,256                        | 33,669                        | 3,779                 | 1,046                 | 61                |
| 35                                              | 894.00          | OTHER EQUIPMENT                        | 18                  | <u>963,782</u>             | <u>781,598</u>       | <u>83,454</u>                 | <u>47,196</u>                 | <u>29,877</u>         | <u>21,560</u>         | <u>96</u>         |
| 36                                              |                 | TOTAL DISTRIBUTION MAINTENANCE         |                     | <u>22,226,675</u>          | <u>17,964,921</u>    | <u>1,881,947</u>              | <u>1,116,817</u>              | <u>736,391</u>        | <u>524,349</u>        | <u>2,250</u>      |
| 37                                              |                 | TOTAL DISTRIBUTION                     |                     | <u>62,853,127</u>          | <u>50,972,310</u>    | <u>5,442,330</u>              | <u>3,077,693</u>              | <u>1,948,651</u>      | <u>1,406,081</u>      | <u>6,063</u>      |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
OTHER O&M EXPENSES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1  
PAGE 8 OF 31  
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            | 686,852            | 627,089            | 51,294            | 7,624             | 680              | 144              | 21             |
| 3                                              | 903.00   | CUSTOMER RECORDS AND COLLECTION EXPENSES   | 6            | 7,794,148          | 7,115,979          | 582,067           | 86,515            | 7,716            | 1,637            | 234            |
| 4                                              | 903.00   | INTEREST ON CUSTOMER DEPOSITS              | 9            | 108,514            | 79,468             | 27,088            | 1,958             | 0                | 0                | 0              |
| 5                                              | 904.00   | UNCOLLECTIBLES-DIS REVENUE                 | 7            | 4,410,259          | 4,257,355          | 82,428            | 70,476            | 0                | 0                | 0              |
| 6                                              | 904.00   | UNCOLLECTIBLES-GMB/GTS REVENUE             | 8            | 323,417            | (3)                | 3,131             | 14,897            | 145,554          | 147,692          | 12,148         |
| 7                                              | 904.00   | UNCOLLECTIBLES-UNBUNDLED GAS               | Direct       | 1,216,174          | 1,139,022          | 41,873            | 35,279            | 0                | 0                | 0              |
| 8                                              | 904.00   | DIRECT USP UNCOLLECTIBLES                  |              | 29,305,816         | 29,305,816         | 0                 | 0                 | 0                | 0                | 0              |
| 9                                              | 905.00   | MISCELLANEOUS                              | 6            | 3,951              | 3,607              | 295               | 44                | 4                | 1                | 0              |
| 10                                             | 921.00   | OFFICE SUPPLIES & EXPENSES                 | 6            | 0                  | 0                  | 0                 | 0                 | 0                | 0                | 0              |
| 11                                             |          | TOTAL CUSTOMER ACCOUNTS                    |              | <u>43,849,131</u>  | <u>42,528,334</u>  | <u>788,176</u>    | <u>216,792</u>    | <u>153,954</u>   | <u>149,473</u>   | <u>12,402</u>  |
| <u>CUST SERVICE &amp; INFORMATION EXPENSES</u> |          |                                            |              |                    |                    |                   |                   |                  |                  |                |
| 12                                             | 907.00   | SUPERVISION                                | 6            | 0                  | 0                  | 0                 | 0                 | 0                | 0                | 0              |
| 13                                             | 908.00   | CUSTOMER ASSISTANCE                        | 6            | 20,892             | 19,075             | 1,560             | 232               | 21               | 4                | 0              |
| 14                                             | 909.00   | INFORMATIONAL & INSTRUCTIONAL EXPENSES     | 6            | 203,522            | 185,819            | 15,199            | 2,259             | 202              | 43               | 1              |
| 15                                             | 910.00   | MISCELLANEOUS                              | 6            | 1,024,093          | 935,015            | 76,479            | 11,367            | 1,014            | 215              | 2              |
| 16                                             | 921.00   | OFFICE SUPPLIES & EXPENSES                 | 6            | 0                  | (3)                | 0                 | 0                 | 0                | 0                | 3              |
| 17                                             | 931.00   | RENTS - GENERAL                            | 6            | 0                  | 0                  | 0                 | 0                 | 0                | 0                | 0              |
| 18                                             | 932.00   | MAINTENANCE                                | 6            | 0                  | 0                  | 0                 | 0                 | 0                | 0                | 0              |
| 19                                             |          | TOTAL CUST SERVICE & INFORMATION           |              | <u>1,248,507</u>   | <u>1,139,906</u>   | <u>93,239</u>     | <u>13,858</u>     | <u>1,236</u>     | <u>262</u>       | <u>6</u>       |
| <u>SALES EXPENSES</u>                          |          |                                            |              |                    |                    |                   |                   |                  |                  |                |
| 20                                             | 912.00   | DEMONSTRATION                              | 6            | 605,075            | 552,427            | 45,187            | 6,716             | 599              | 127              | 18             |
| 21                                             | 913.00   | ADVERTISING                                | 6            | <u>274,671</u>     | <u>250,772</u>     | <u>20,512</u>     | <u>3,049</u>      | <u>272</u>       | <u>58</u>        | <u>8</u>       |
| 22                                             |          | TOTAL SALES                                |              | <u>879,746</u>     | <u>803,199</u>     | <u>65,699</u>     | <u>9,765</u>      | <u>871</u>       | <u>185</u>       | <u>26</u>      |
| <u>ADMINISTRATIVE AND GENERAL EXPENSES</u>     |          |                                            |              |                    |                    |                   |                   |                  |                  |                |
| 23                                             | 920.00   | SALARIES                                   | 19           | 24,103,497         | 19,865,861         | 2,068,321         | 1,073,570         | 638,984          | 454,110          | 2,651          |
| 24                                             | 920.00   | SALARIES - C&I NETWORK ONLY                | 26           | 102,933            | 0                  | 0                 | 20,988            | 66,359           | 13,889           | 1,697          |
| 25                                             | 921.00   | OFFICE SUPPLIES & EXPENSES                 | 19           | (1,524,783)        | (1,256,711)        | (130,842)         | (67,914)          | (40,422)         | (28,727)         | (168)          |
| 26                                             | 922.00   | ADMIN. EXPENSE TRANSFERRED                 | 19           | 0                  | 0                  | 0                 | 0                 | 0                | 0                | 0              |
| 25                                             | 923.00   | OUTSIDE SERVICES EMPLOYED                  | 19           | 25,906,451         | 21,351,838         | 2,223,033         | 1,153,873         | 686,780          | 488,078          | 2,850          |
| 26                                             | 923.00   | OUTSIDE SERVICES EMPLOYED - C&I NETWORK OI | 26           | 1,183,511          | 0                  | 0                 | 241,318           | 762,986          | 159,691          | 19,516         |
| 27                                             | 924.00   | PROPERTY INSURANCE                         | 19           | 55,948             | 46,112             | 4,801             | 2,492             | 1,483            | 1,054            | 6              |
| 28                                             | 925.00   | INJURIES AND DAMAGES                       | 19           | 4,073,358          | 3,357,221          | 349,535           | 181,427           | 107,985          | 76,742           | 448            |
| 29                                             | 926.00   | EMPLOYEE PENSIONS & BENEFITS               | 24           | 15,645,986         | 12,753,513         | 1,368,554         | 740,212           | 452,169          | 329,974          | 1,565          |
| 30                                             | 928.00   | REGULATORY COMMISSION EXPENSES             | 19           | 2,418,231          | 1,993,082          | 207,508           | 107,708           | 64,107           | 45,560           | 266            |
| 31                                             | 930.00   | MISCELLANEOUS GENERAL                      | 19           | 637,529            | 525,445            | 54,706            | 28,396            | 16,901           | 12,011           | 70             |
| 32                                             | 931.00   | RENTS-GENERAL                              | 19           | 5,954,736          | 4,907,834          | 510,976           | 265,224           | 157,860          | 112,187          | 655            |
| 33                                             | 932.00   | MAINTENANCE                                | 19           | <u>2,468,677</u>   | <u>2,034,659</u>   | <u>211,837</u>    | <u>109,955</u>    | <u>65,445</u>    | <u>46,510</u>    | <u>272</u>     |
| 34                                             |          | TOTAL ADMINISTRATIVE & GENERAL             |              | <u>81,026,074</u>  | <u>65,578,853</u>  | <u>6,868,430</u>  | <u>3,857,248</u>  | <u>2,980,636</u> | <u>1,711,078</u> | <u>29,829</u>  |
| 35                                             |          | TOTAL O & M EXPENSES                       |              | <u>354,524,192</u> | <u>282,060,506</u> | <u>34,649,530</u> | <u>25,953,683</u> | <u>8,275,159</u> | <u>3,267,079</u> | <u>318,236</u> |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
TAXES OTHER THAN INCOME TAXES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1

PAGE 9 OF 31

WITNESS: M. P. BALMERT

| LINE<br>NO. | ACCT<br>NO. | ACCOUNT TITLE                 | ALLOC<br>FACTOR | TOTAL<br>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>FEDERAL TAXES</u>          |                 | \$               | \$               | \$               | \$               | \$             | \$            | \$         |
| 1           | 408.00      | FEDERAL/STATE UNEMPLOYMENT    | 24              | 137,971          | 112,464          | 12,068           | 6,527            | 3,987          | 2,910         | 14         |
| 2           | 408.00      | FICA                          | 24              | <u>2,598,027</u> | <u>2,117,729</u> | <u>227,249</u>   | <u>122,913</u>   | <u>75,083</u>  | <u>54,792</u> | <u>260</u> |
| 3           |             | TOTAL FEDERAL TAXES           |                 | <u>2,735,998</u> | <u>2,230,194</u> | <u>239,318</u>   | <u>129,440</u>   | <u>79,070</u>  | <u>57,702</u> | <u>274</u> |
|             |             | <u>STATE TAXES</u>            |                 |                  |                  |                  |                  |                |               |            |
| 4           | 408.00      | PA PROPERTY TAXES             | 11              | 435,885          | 345,212          | 38,149           | 24,963           | 16,241         | 11,128        | 192        |
| 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              | 275              | 218              | 24               | 16               | 10             | 7             | 0          |
| 8           | 408.00      | STATE SALES AND USE TAX       | 19              | 284,465          | 234,453          | 24,410           | 12,670           | 7,541          | 5,359         | 31         |
| 9           | 408.00      | OTHER                         | 19              | <u>180</u>       | <u>148</u>       | <u>15</u>        | <u>8</u>         | <u>5</u>       | <u>3</u>      | <u>0</u>   |
| 10          |             | TOTAL STATE TAXES             |                 | <u>720,805</u>   | <u>580,032</u>   | <u>62,598</u>    | <u>37,657</u>    | <u>23,797</u>  | <u>16,498</u> | <u>223</u> |
| 11          |             | TOTAL TAXES OTHER THAN INCOME |                 | <u>3,456,803</u> | <u>2,810,225</u> | <u>301,916</u>   | <u>167,097</u>   | <u>102,868</u> | <u>74,200</u> | <u>497</u> |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
RATE BASE  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1

PAGE 10 OF 31

WITNESS: M. P. BALMERT

| LINE NO.                     | ACCT NO.<br>(A) | ACCOUNT TITLE<br>(B)                      | ALLOC FACTOR<br>(C) | TOTAL COMPANY<br>(D)<br>\$ | RSS/RDS<br>(E)<br>\$ | SGSS1/SCD1/SGDS1<br>(F)<br>\$ | SGSS2/SCD2/SGDS2<br>(G)<br>\$ | SDS/LGSS<br>(H)<br>\$ | LDS/LGSS<br>(I)<br>\$ | MLDS<br>(J)<br>\$ |
|------------------------------|-----------------|-------------------------------------------|---------------------|----------------------------|----------------------|-------------------------------|-------------------------------|-----------------------|-----------------------|-------------------|
| 1                            | 101-107         | GROSS PLANT [PAGE 3]                      |                     | 2,741,791,737              | 2,167,432,993        | 239,832,976                   | 157,982,156                   | 104,842,191           | 70,362,565            | 1,338,856         |
| 2                            | 117.00          | GAS STORED UNDERGROUND - NON CURRENT      | 25                  | 3,794,693                  | 2,809,704            | 506,250                       | 410,320                       | 62,499                | 0                     | 5,920             |
| 3                            | 108-111         | DEPRECIATION RESERVE [PAGE 4]             |                     | (499,229,725)              | (399,055,941)        | (45,336,221)                  | (26,972,462)                  | (16,211,451)          | (11,293,922)          | (359,729)         |
| 4                            | 117.00          | GAS LOST-UNDERGROUND STORAGE              | 25                  | (163,467)                  | (121,036)            | (21,808)                      | (17,676)                      | (2,692)               | 0                     | (255)             |
| 5                            |                 | NET PLANT                                 |                     | 2,246,193,238              | 1,771,065,720        | 194,981,197                   | 131,402,339                   | 88,690,547            | 59,068,644            | 984,792           |
| <u>WORKING CAPITAL</u>       |                 |                                           |                     |                            |                      |                               |                               |                       |                       |                   |
| 6                            | 154.00          | MATERIALS & SUPPLIES                      | 11                  | 851,388                    | 674,282              | 74,514                        | 48,759                        | 31,723                | 21,736                | 375               |
| 7                            | 164.00          | GAS STORED UNDERGROUND - FSS              | 25                  | 50,432,424                 | 37,341,679           | 6,728,190                     | 5,453,258                     | 830,622               | 0                     | 78,675            |
| 8                            | 165.00          | PREPAYMENTS                               | 19                  | 2,338,584                  | 1,927,437            | 200,674                       | 104,161                       | 61,996                | 44,059                | 257               |
| 9                            | 165.00          | CLOUD BASED ASSETS                        | 11                  | 748,422                    | 592,736              | 65,502                        | 42,862                        | 27,886                | 19,107                | 329               |
| 10                           |                 | CASH WORKING CAPITAL - GAS PURCHASES      | 4                   | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 11                           |                 | CASH WORKING CAPITAL - ALL OTHER          | 19                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 12                           |                 | TOTAL WORKING CAPITAL                     |                     | 54,370,818                 | 40,536,134           | 7,068,880                     | 5,649,040                     | 952,227               | 84,902                | 79,636            |
| <u>DEFERRED INCOME TAXES</u> |                 |                                           |                     |                            |                      |                               |                               |                       |                       |                   |
| 13                           | 190.00          | ACCUMULATED DEF INCOME TAX                | 12                  | 79,055,237                 | 62,599,890           | 6,926,820                     | 4,535,399                     | 2,942,436             | 2,014,327             | 36,365            |
| 14                           | 282.00          | ACCUMULATED DEF INCOME TAX                | 12                  | (460,523,471)              | (364,665,511)        | (40,351,067)                  | (26,420,232)                  | (17,140,684)          | (11,734,138)          | (211,841)         |
| 15                           | 282.00          | ACCUMULATED DEF INCOME TAX - C&I NET ONLY | 26                  | (263,690)                  | 0                    | 0                             | (53,766)                      | (169,996)             | (35,580)              | (4,348)           |
| 16                           | 283.00          | ACCUMULATED DEF INCOME TAX                | 12                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 17                           |                 | TOTAL DEFERRED INCOME TAXES               |                     | (381,731,924)              | (302,065,621)        | (33,424,247)                  | (21,938,599)                  | (14,368,243)          | (9,755,390)           | (179,824)         |
| 18                           | 235.00          | CUSTOMER DEPOSITS                         | 9                   | (2,838,227)                | (2,078,519)          | (708,507)                     | (51,202)                      | 0                     | 0                     | 0                 |
| 19                           | 252.00          | CUSTOMER ADVANCES                         | 20                  | 2,552                      | 1,943                | 223                           | 179                           | 124                   | 83                    | 0                 |
| 20                           |                 | RATE BASE                                 |                     | 1,915,996,457              | 1,507,459,657        | 167,917,546                   | 115,061,757                   | 75,274,654            | 49,398,238            | 884,604           |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
STATE/FEDERAL INCOME TAXES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1  
PAGE 11 OF 31  
WITNESS: M. P. BALMERT

| LINE<br>NO.               | ACCT<br>NO.<br>(A)                            | ALLOC<br>FACTOR<br>(B) | TOTAL<br>COMPANY<br>(C)<br>\$ | RSS/RDS<br>(D)<br>\$ | SGSS1/SCD1/SGDS1<br>(E)<br>\$ | SGSS2/SCD2/SGDS2<br>(F)<br>\$ | SDS/LGSS<br>(G)<br>\$ | LDS/LGSS<br>(H)<br>\$ | MLDS<br>(I)<br>\$ |
|---------------------------|-----------------------------------------------|------------------------|-------------------------------|----------------------|-------------------------------|-------------------------------|-----------------------|-----------------------|-------------------|
| <u>STATE INCOME TAX</u>   |                                               |                        |                               |                      |                               |                               |                       |                       |                   |
| 1                         | OPERATING INCOME BEFORE TAXES (PG. 2, LINE 8) |                        | 140,065,217                   | 79,095,156           | 14,739,320                    | 22,897,222                    | 9,606,284             | 12,614,000            | 1,113,235         |
| 2                         | STATUTORY ADJUSTMENTS                         | 12                     | (80,890,686)                  | (64,053,290)         | (7,087,642)                   | (4,640,699)                   | (3,010,751)           | (2,061,095)           | (37,210)          |
| 3                         | INTEREST ON DEBT                              |                        | (45,409,116)                  | (35,726,794)         | (3,979,646)                   | (2,726,964)                   | (1,784,009)           | (1,170,738)           | (20,965)          |
| 4                         | PA BONUS DEPRECIATION ADJUSTMENT              | 12                     | <u>(12,561,349)</u>           | <u>(9,946,704)</u>   | <u>(1,100,625)</u>            | <u>(720,645)</u>              | <u>(467,533)</u>      | <u>(320,063)</u>      | <u>(5,778)</u>    |
| 5                         | STATE TAXABLE INCOME                          |                        | 1,204,066                     | (30,631,632)         | 2,571,407                     | 14,808,915                    | 4,343,990             | 9,062,104             | 1,049,282         |
| 6                         | NET OPERATING LOSS DEDUCTION                  | 12                     | <u>(481,626)</u>              | <u>(381,376)</u>     | <u>(42,200)</u>               | <u>(27,631)</u>               | <u>(17,926)</u>       | <u>(12,272)</u>       | <u>(222)</u>      |
|                           | STATE TAXABLE INCOME                          |                        | 722,440                       | (31,013,007)         | 2,529,207                     | 14,781,285                    | 4,326,064             | 9,049,832             | 1,049,060         |
| 7                         | STATE NET INCOME TAX @ 9.99%                  |                        | 72,172                        | (3,098,199)          | 252,668                       | 1,476,650                     | 432,174               | 904,078               | 104,801           |
| 8                         | DEFERRED INCOME TAXES                         | 12                     | <u>10,162</u>                 | <u>8,047</u>         | <u>890</u>                    | <u>583</u>                    | <u>378</u>            | <u>259</u>            | <u>5</u>          |
| 9                         | STATE INCOME TAX                              |                        | 82,334                        | (3,090,153)          | 253,558                       | 1,477,233                     | 432,552               | 904,337               | 104,806           |
| <u>FEDERAL INCOME TAX</u> |                                               |                        |                               |                      |                               |                               |                       |                       |                   |
| 10                        | OPERATING INCOME BEFORE TAXES (PG. 2, LINE 8) |                        | 140,065,217                   | 79,095,156           | 14,739,320                    | 22,897,222                    | 9,606,284             | 12,614,000            | 1,113,235         |
| 11                        | STATE NET INCOME TAX (LINE 7)                 |                        | (72,172)                      | 3,098,199            | (252,668)                     | (1,476,650)                   | (432,174)             | (904,078)             | (104,801)         |
| 12                        | STATUTORY ADJUSTMENTS (LINES 2 & 3)           | 12                     | <u>(126,299,802)</u>          | <u>(99,780,084)</u>  | <u>(11,067,288)</u>           | <u>(7,367,662)</u>            | <u>(4,794,761)</u>    | <u>(3,231,833)</u>    | <u>(58,175)</u>   |
| 13                        | FEDERAL TAXABLE INCOME                        |                        | 13,693,243                    | (17,586,728)         | 3,419,365                     | 14,052,910                    | 4,379,349             | 8,478,089             | 950,259           |
| 14                        | FEDERAL INCOME TAX @ 21%                      |                        | 2,875,581                     | (3,693,213)          | 718,067                       | 2,951,111                     | 919,663               | 1,780,399             | 199,554           |
| 15                        | DEFERRED INCOME TAXES                         | 12                     | 18,403,387                    | 14,572,722           | 1,612,505                     | 1,055,802                     | 684,974               | 468,918               | 8,466             |
| 16                        | TAX REFUND AMORTIZATION                       | 12                     | 0                             | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 17                        | FLOW BACK OF EXCESS DEFERRED TAXES            | 12                     | (1,747,266)                   | (1,383,573)          | (153,095)                     | (100,241)                     | (65,033)              | (44,520)              | (804)             |
| 18                        | EFFECT OF CNIT DEFERRED TAX ON FIT            | 12                     | <u>(2,134)</u>                | <u>(1,690)</u>       | <u>(187)</u>                  | <u>(122)</u>                  | <u>(79)</u>           | <u>(54)</u>           | <u>(1)</u>        |
| 19                        | FEDERAL INCOME TAX                            |                        | 19,529,568                    | 9,494,247            | 2,177,289                     | 3,906,550                     | 1,539,525             | 2,204,742             | 207,215           |
| 20                        | STATE NET INCOME TAX (LINE 9)                 |                        | <u>82,334</u>                 | <u>(3,090,153)</u>   | <u>253,558</u>                | <u>1,477,233</u>              | <u>432,552</u>        | <u>904,337</u>        | <u>104,806</u>    |
| 21                        | TOTAL INCOME TAXES                            |                        | <u>19,611,902</u>             | <u>6,404,094</u>     | <u>2,430,847</u>              | <u>5,383,784</u>              | <u>1,972,077</u>      | <u>3,109,079</u>      | <u>312,021</u>    |

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**ALLOCATION FACTORS**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019**

**ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND**

**111, SCHEDULE 1**

**PAGE 12 OF 31**

**WITNESS: M. P. BALMERT**

| <b>LINE<br/>NO.</b> | <b>DESCRIPTION<br/>(A)</b>                   | <b>ALLOC<br/>FACTOR<br/>(B)</b> | <b>TOTAL<br/>COMPANY<br/>(C)</b> | <b>RSS/RDS<br/>(D)</b> | <b>SGSS1/SCD1/SGDS1<br/>(E)</b> | <b>SGSS2/SCD2/SGDS2<br/>(F)</b> | <b>SDS/LGSS<br/>(G)</b> | <b>LDS/LGSS<br/>(H)</b> | <b>MLDS<br/>(I)</b> |
|---------------------|----------------------------------------------|---------------------------------|----------------------------------|------------------------|---------------------------------|---------------------------------|-------------------------|-------------------------|---------------------|
| 1                   | DESIGN DAY                                   | 1                               | 791,440,000                      | 447,700,000            | 78,600,000                      | 102,800,000                     | 65,142,000              | 97,198,000              | 0                   |
| 2                   | PERCENT                                      |                                 | 100.000%                         | 56.568%                | 9.931%                          | 12.989%                         | 8.231%                  | 12.281%                 | 0.000%              |
| 3                   | THROUGHPUT EXCLUDING TRANSPORTATION          | 2                               | 37,219,347                       | 27,512,601             | 4,812,979                       | 4,055,014                       | 766,053                 | 0                       | 72,700              |
| 4                   | PERCENT                                      |                                 | 100.000%                         | 73.921%                | 12.931%                         | 10.895%                         | 2.058%                  | 0.000%                  | 0.195%              |
| 5                   | THROUGHPUT EXCLUDING MDS                     | 3                               | 77,383,630                       | 34,437,601             | 6,456,921                       | 8,835,480                       | 7,001,685               | 20,651,944              | 0                   |
| 6                   | PERCENT                                      |                                 | 100.000%                         | 44.502%                | 8.344%                          | 11.418%                         | 9.048%                  | 26.688%                 | 0.000%              |
| 7                   | GAS PURCHASED EXPENSE                        | 4                               | 163,506,936                      | 120,184,061            | 21,240,416                      | 18,646,735                      | 3,167,707               | 0                       | 268,017             |
| 8                   | PERCENT                                      |                                 | 100.000%                         | 73.504%                | 12.991%                         | 11.404%                         | 1.937%                  | 0.000%                  | 0.164%              |
| 9                   | PEAK & AVERAGE MAINS                         | 5                               |                                  |                        |                                 |                                 |                         |                         |                     |
| 10                  | PERCENT                                      |                                 | 100.000%                         | 56.162%                | 9.262%                          | 11.856%                         | 8.042%                  | 14.678%                 | 0.000%              |
| 11                  | AVERAGE NO. OF CUSTOMERS                     | 6                               | 434,281                          | 396,498                | 32,433                          | 4,819                           | 430                     | 90                      | 11                  |
| 12                  | PERCENT                                      |                                 | 100.000%                         | 91.299%                | 7.468%                          | 1.110%                          | 0.099%                  | 0.021%                  | 0.003%              |
| 13                  | DISTRIBUTION UNCOLLECTIBLES                  | 7                               | 8,970,092                        | 8,659,104              | 167,619                         | 143,369                         | 0                       | 0                       | 0                   |
| 14                  | PERCENT                                      |                                 | 100.000%                         | 96.533%                | 1.869%                          | 1.598%                          | 0.000%                  | 0.000%                  | 0.000%              |
| 15                  | CURRENT GMB/GTS REVENUE                      | 8                               | 39,195,616                       | 0                      | 379,333                         | 1,805,184                       | 17,639,825              | 17,899,205              | 1,472,069           |
| 16                  | PERCENT                                      |                                 | 100.001%                         | 0.000%                 | 0.968%                          | 4.606%                          | 45.005%                 | 45.666%                 | 3.756%              |
| 17                  | CUSTOMER DEPOSITS                            | 9                               | 2,227,377                        | 1,631,178              | 556,015                         | 40,184                          | 0                       | 0                       | 0                   |
| 18                  | PERCENT                                      |                                 | 100.000%                         | 73.233%                | 24.963%                         | 1.804%                          | 0.000%                  | 0.000%                  | 0.000%              |
| 19                  | FORFEITED DISCOUNTS                          | 10                              | 1,192,278                        | 880,955                | 116,974                         | 110,646                         | 43,449                  | 37,195                  | 3,059               |
| 20                  | PERCENT                                      |                                 | 100.000%                         | 73.888%                | 9.811%                          | 9.280%                          | 3.644%                  | 3.120%                  | 0.257%              |
| 21                  | DIST. PLANT EXCL ACCTS 375.70, 375.71, & 387 | 11                              | 2,632,013,410                    | 2,084,467,771          | 230,362,553                     | 150,724,980                     | 98,080,576              | 67,207,147              | 1,170,384           |
| 22                  | PERCENT                                      |                                 | 100.000%                         | 79.198%                | 8.752%                          | 5.727%                          | 3.726%                  | 2.553%                  | 0.044%              |
| 23                  | GROSS PLANT                                  | 12                              | 2,737,191,110                    | 2,167,432,993          | 239,832,976                     | 157,044,088                     | 101,876,259             | 69,741,803              | 1,262,992           |
| 24                  | PERCENT                                      |                                 | 100.000%                         | 79.185%                | 8.762%                          | 5.737%                          | 3.722%                  | 2.548%                  | 0.046%              |
| 25                  | MAINS - ACCOUNT 376                          | 13                              | 1,804,917,543                    | 1,373,735,329          | 157,886,715                     | 126,468,179                     | 87,758,955              | 58,776,664              | 291,702             |
| 26                  | PERCENT                                      |                                 | 100.000%                         | 76.111%                | 8.748%                          | 7.007%                          | 4.862%                  | 3.256%                  | 0.016%              |



**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**ALLOCATION FACTORS (CONT.)**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019**

**ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND**

**111, SCHEDULE 1**

**PAGE 13 OF 31**

**WITNESS: M. P. BALMERT**

| <u>LINE<br/>NO.</u> | <u>DESCRIPTION<br/>(A)</u>                  | <u>ALLOC<br/>FACTOR<br/>(B)</u> | <u>TOTAL<br/>COMPANY<br/>(C)</u> | <u>RSS/RDS<br/>(D)</u> | <u>SGSS1/SCD1/SGDS1<br/>(E)</u> | <u>SGSS2/SCD2/SGDS2<br/>(F)</u> | <u>SDS/LGSS<br/>(G)</u> | <u>LDS/LGSS<br/>(H)</u> | <u>MLDS<br/>(I)</u> |
|---------------------|---------------------------------------------|---------------------------------|----------------------------------|------------------------|---------------------------------|---------------------------------|-------------------------|-------------------------|---------------------|
| 27                  | COMPOSITE DIRECT PLANT - ACCTS 376 & 380    | 14                              | 2,397,334,606                    | 1,911,926,672          | 203,099,835                     | 133,808,202                     | 88,843,074              | 59,363,155              | 293,668             |
| 28                  | PERCENT                                     |                                 | 100.000%                         | 79.752%                | 8.472%                          | 5.582%                          | 3.706%                  | 2.476%                  | 0.012%              |
| 29                  | SERVICES                                    | 15                              | 413,534,515                      | 375,686,736            | 31,559,250                      | 5,125,487                       | 755,122                 | 407,921                 | 0                   |
| 30                  | PERCENT                                     |                                 | 100.000%                         | 90.847%                | 7.632%                          | 1.239%                          | 0.183%                  | 0.099%                  | 0.000%              |
| 31                  | METERS                                      | 16                              | 29,582,143                       | 22,267,185             | 4,764,566                       | 2,226,579                       | 250,017                 | 69,958                  | 3,838               |
| 32                  | PERCENT                                     |                                 | 100.000%                         | 75.273%                | 16.106%                         | 7.527%                          | 0.845%                  | 0.236%                  | 0.013%              |
| 33                  | INDUSTRIAL M & R                            | 17                              | 5,640,975                        | 0                      | 151,859                         | 968,514                         | 1,976,017               | 2,544,585               | 0                   |
| 34                  | PERCENT                                     |                                 | 100.000%                         | 0.000%                 | 2.692%                          | 17.169%                         | 35.030%                 | 45.109%                 | 0.000%              |
| 35                  | OTHER DISTRIBUTION O & M EXPENSES           | 18                              | 49,893,232                       | 40,462,224             | 4,320,133                       | 2,443,047                       | 1,546,894               | 1,116,168               | 4,767               |
| 36                  | PERCENT                                     |                                 | 100.000%                         | 81.097%                | 8.659%                          | 4.897%                          | 3.100%                  | 2.237%                  | 0.010%              |
| 37                  | O & M EXCL GAS PUR, UNCOLLECTIBLES, & A & G | 19                              | 74,735,516                       | 61,595,402             | 6,413,252                       | 3,329,048                       | 1,981,262               | 1,408,309               | 8,243               |
| 38                  | PERCENT                                     |                                 | 100.000%                         | 82.419%                | 8.581%                          | 4.454%                          | 2.651%                  | 1.884%                  | 0.011%              |
| 39                  | CUSTOMER/DEMAND MAINS                       | 20                              |                                  |                        |                                 |                                 |                         |                         |                     |
| 40                  | PERCENT                                     |                                 | 100.000%                         | 76.123%                | 8.749%                          | 7.008%                          | 4.863%                  | 3.257%                  | 0.000%              |
| 41                  | HOUSE REGULATORS (GPA 383)                  | 21                              | 3,006,915                        | 2,725,549              | 230,087                         | 45,166                          | 5,009                   | 996                     | 108                 |
| 42                  | PERCENT                                     |                                 | 100.00%                          | 90.642%                | 7.652%                          | 1.502%                          | 0.167%                  | 0.033%                  | 0.004%              |
| 43                  | AVERAGE - ALLOCATORS 5 & 20                 | 22                              |                                  |                        |                                 |                                 |                         |                         |                     |
| 44                  | PERCENT                                     |                                 | 100.00%                          | 66.141%                | 9.006%                          | 9.432%                          | 6.453%                  | 8.968%                  | 0.000%              |
| 45                  | METERS AND HOUSE REGULATORS                 | 23                              | 119,886,452                      | 92,881,101             | 17,857,297                      | 7,989,316                       | 896,623                 | 248,076                 | 14,040              |
| 46                  | PERCENT                                     |                                 | 100.000%                         | 77.474%                | 14.895%                         | 6.664%                          | 0.748%                  | 0.207%                  | 0.012%              |
| 47                  | LABOR                                       | 24                              | 30,125,334                       | 24,556,020             | 2,635,157                       | 1,425,367                       | 870,573                 | 635,228                 | 2,990               |
| 48                  | PERCENT                                     |                                 | 100.000%                         | 81.513%                | 8.747%                          | 4.731%                          | 2.890%                  | 2.109%                  | 0.010%              |
| 49                  | SALES AND CHOICE TRANSPORTATION             | 25                              | 46,510,327                       | 34,437,601             | 6,205,037                       | 5,028,935                       | 766,053                 | 0                       | 72,700              |
| 50                  | PERCENT                                     |                                 | 100.000%                         | 74.043%                | 13.341%                         | 10.813%                         | 1.647%                  | 0.000%                  | 0.156%              |
| 51                  | C&I NETWORK CUSTOMERS                       | 26                              | 667                              | 0                      | 0                               | 136                             | 430                     | 90                      | 11                  |
| 52                  | PERCENT                                     |                                 | 100.000%                         | 0.000%                 | 0.000%                          | 20.390%                         | 64.468%                 | 13.493%                 | 1.649%              |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
CUSTOMER BASED COSTS - CUSTOMER CHARGE CALCULATION WITH MAINS COMPONENT  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1  
PAGE 14 OF 31  
WITNESS: M. P. BALMERT

| LINE NO. | ACCT NO. | ACCOUNT TITLE<br>(A)                | ALLOC FACTOR<br>(B) | TOTAL COMPANY<br>(C)<br>\$ | RSS/RDS<br>(D)<br>\$ | SGSS1/SCD1/SGDS1<br>(E)<br>\$ | SGSS2/SCD2/SGDS2<br>(F)<br>\$ | SDS/LGSS<br>(G)<br>\$ | LDS/LGSS<br>(I)<br>\$ | MLDS<br>(J)<br>\$ |
|----------|----------|-------------------------------------|---------------------|----------------------------|----------------------|-------------------------------|-------------------------------|-----------------------|-----------------------|-------------------|
| 1        | 303.30   | CUSTOMER & OTHER-BASED SOFTWARE [1] | 11                  | 21,874,422                 | 17,324,105           | 1,914,449                     | 1,252,748                     | 815,041               | 558,454               | 9,625             |
| 2        | 376.00   | MAINS [2]                           | 6                   | 851,637,367                | 777,536,400          | 63,600,279                    | 9,453,175                     | 843,121               | 178,844               | 25,549            |
| 3        | 376.00   | DIRECT - MAINS - MDS [2]            | Pg 3                | 104,774                    | 0                    | 0                             | 0                             | 0                     | 0                     | 104,774           |
| 4        | 376.08   | MAINS-CSL REPLACEMENTS [2]          | 6                   | 11,806,428                 | 10,779,152           | 881,704                       | 131,051                       | 11,688                | 2,479                 | 354               |
| 5        | 376.30   | MAINS-BARE STEEL [2]                | 6                   | 33,075,630                 | 30,197,720           | 2,470,088                     | 367,139                       | 32,745                | 6,946                 | 992               |
| 6        | 376.30   | DIRECT - MAINS-BARE STEEL [2]       | Pg 3                | 40,173                     | 0                    | 0                             | 0                             | 0                     | 0                     | 40,173            |
| 7        | 376.80   | MAINS-CAST IRON [2]                 | 6                   | 199,155                    | 181,826              | 14,873                        | 2,211                         | 197                   | 42                    | 6                 |
| 8        | 380.00   | SERVICES                            | 15                  | 592,415,097                | 538,191,343          | 45,213,120                    | 7,340,023                     | 1,084,120             | 586,491               | 0                 |
| 9        | 380.00   | DIRECT - SERVICES                   |                     | 1,966                      | 0                    | 0                             | 0                             | 0                     | 0                     | 1,966             |
| 10       | 380.12   | CSL REPLACEMENT                     | 15                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 11       | 381.00   | METERS                              | 16                  | 40,150,510                 | 30,222,493           | 6,466,641                     | 3,022,129                     | 339,272               | 94,755                | 5,220             |
| 12       | 381.10   | AUTOMATIC METER READING             | 16                  | 19,350,242                 | 14,565,508           | 3,116,550                     | 1,456,493                     | 163,510               | 45,667                | 2,516             |
| 13       | 382.00   | METER INSTALLATIONS                 | 16                  | 43,214,952                 | 32,529,191           | 6,960,200                     | 3,252,789                     | 365,166               | 101,987               | 5,618             |
| 14       | 383.00   | HOUSE REGULATORS                    | 21                  | 13,305,976                 | 12,060,802           | 1,018,173                     | 199,856                       | 22,221                | 4,391                 | 532               |
| 15       | 384.00   | HOUSE REG INSTALLATIONS             | 21                  | 3,864,772                  | 3,503,107            | 295,732                       | 58,049                        | 6,454                 | 1,275                 | 155               |
| 16       | 385.00   | IND M&R EQUIPMENT                   | 17                  | 8,110,311                  | 0                    | 218,330                       | 1,392,459                     | 2,841,042             | 3,658,480             | 0                 |
| 17       | 385.00   | DIRECT - IND M&R EQUIPMENT          | Pg 3                | 373,618                    | 0                    | 0                             | 0                             | 0                     | 0                     | 373,618           |
| 18       | 385.10   | IND M&R EQUIPMENT - LG VOLUME       | 17                  | 1,085,273                  | 0                    | 29,216                        | 186,331                       | 380,171               | 489,556               | 0                 |
| 19       | 389-398  | GENERAL PLANT [1]                   | 11                  | <u>19,411,518</u>          | <u>15,373,534</u>    | <u>1,698,896</u>              | <u>1,111,698</u>              | <u>723,273</u>        | <u>495,576</u>        | <u>8,541</u>      |
| 20       |          | TOTAL GROSS PLANT                   |                     | 1,660,022,183              | 1,482,465,181        | 133,898,251                   | 29,226,150                    | 7,628,021             | 6,224,943             | 579,638           |
| 21       | 303.30   | CUSTOMER & OTHER-BASED SOFTWARE [1] | 11                  | 9,490,527                  | 7,516,308            | 830,611                       | 543,523                       | 353,617               | 242,293               | 4,176             |
| 22       | 376.00   | MAINS [2]                           | 6                   | 100,826,452                | 92,053,542           | 7,529,719                     | 1,119,174                     | 99,818                | 21,174                | 3,025             |
| 23       | 376.00   | DIRECT - MAINS - MDS [2]            | Pg 4                | 35,639                     | 0                    | 0                             | 0                             | 0                     | 0                     | 35,639            |
| 24       | 376.08   | MAINS-CSL REPLACEMENTS [2]          | 6                   | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 25       | 376.30   | MAINS-BARE STEEL [2]                | 6                   | 22,854,827                 | 20,866,228           | 1,706,798                     | 253,689                       | 22,626                | 4,800                 | 686               |
| 26       | 376.30   | DIRECT - MAINS-BARE STEEL [2]       | Pg 4                | 40,937                     | 0                    | 0                             | 0                             | 0                     | 0                     | 40,937            |
| 27       | 376.80   | MAINS-CAST IRON [2]                 | 6                   | 117,829                    | 107,576              | 8,799                         | 1,308                         | 117                   | 25                    | 4                 |
| 28       | 380.00   | SERVICES                            | 15                  | 135,665,837                | 123,248,343          | 10,354,017                    | 1,680,900                     | 248,268               | 134,309               | 0                 |
| 29       | 380.00   | DIRECT - SERVICES                   | Pg 4                | 1,920                      | 0                    | 0                             | 0                             | 0                     | 0                     | 1,920             |
| 30       | 380.12   | CSL REPLACEMENT                     | 15                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 31       | 381.00   | METERS                              | 16                  | 17,411,447                 | 13,106,118           | 2,804,288                     | 1,310,560                     | 147,127               | 41,091                | 2,263             |
| 32       | 381.10   | AUTOMATIC METER READING             | 16                  | 13,729,683                 | 10,334,744           | 2,211,303                     | 1,033,433                     | 116,016               | 32,402                | 1,785             |
| 33       | 382.00   | METER INSTALLATIONS                 | 16                  | 13,549,487                 | 10,199,106           | 2,182,280                     | 1,019,870                     | 114,493               | 31,977                | 1,761             |
| 34       | 383.00   | HOUSE REGULATORS                    | 21                  | 4,334,095                  | 3,928,511            | 331,645                       | 65,098                        | 7,238                 | 1,430                 | 173               |
| 35       | 384.00   | HOUSE REG INSTALLATIONS             | 21                  | 3,112,325                  | 2,821,074            | 238,155                       | 46,747                        | 5,198                 | 1,027                 | 124               |
| 36       | 385.00   | IND M&R EQUIPMENT                   | 17                  | 3,051,516                  | 0                    | 82,147                        | 523,915                       | 1,068,946             | 1,376,508             | 0                 |
| 37       | 385.00   | DIRECT - IND M&R EQUIPMENT          | Pg 4                | 110,824                    | 0                    | 0                             | 0                             | 0                     | 0                     | 110,824           |
| 38       | 385.10   | IND M&R EQUIPMENT - LG VOLUME       | 17                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 39       | 389-398  | GENERAL PLANT [1]                   | 11                  | <u>8,615,368</u>           | <u>6,823,199</u>     | <u>754,017</u>                | <u>493,402</u>                | <u>321,009</u>        | <u>219,950</u>        | <u>3,791</u>      |
| 40       |          | TOTAL DEPRECIATION RESERVE          |                     | 332,948,713                | 291,004,749          | 29,033,779                    | 8,091,619                     | 2,504,473             | 2,106,986             | 207,108           |

- [1] CUSTOMER PORTION OF DISTRIBUTION PLANT @ 61.018% (PAGE 17)  
[2] CUSTOMER PORTION OF MAINS @ 49.690% (PAGE 17)

COLUMBIA GAS OF PENNSYLVANIA, INC.  
CUSTOMER BASED COSTS - CUSTOMER CHARGE CALCULATION WITH MAINS COMPONENT  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1  
PAGE 15 OF 31  
WITNESS: M. P. BALMERT

| LINE NO. | ACCT NO.    | ACCOUNT TITLE<br>(A)                       | ALLOC FACTOR<br>(B) | TOTAL COMPANY<br>(C)<br>\$ | RSS/RDS<br>(D)<br>\$ | SGSS1/SCD1/SGDS1<br>(E)<br>\$ | SGSS2/SCD2/SGDS2<br>(F)<br>\$ | SDS/LGSS<br>(G)<br>\$ | LDS/LGSS<br>(I)<br>\$ | MLDS<br>(J)<br>\$ |
|----------|-------------|--------------------------------------------|---------------------|----------------------------|----------------------|-------------------------------|-------------------------------|-----------------------|-----------------------|-------------------|
| 1        | 154.00      | CUSTOMER BASED MATERIALS & SUPPLIES        | Pg 22               | 523,619                    | 468,962              | 42,144                        | 8,689                         | 1,970                 | 1,673                 | 182               |
| 2        | 190-282-283 | CUSTOMER BASED DEFERRED INCOME TAXES       | Pg 22               | (231,508,666)              | (206,746,356)        | (18,673,609)                  | (4,075,914)                   | (1,063,813)           | (868,138)             | (80,837)          |
| 3        | 235.00      | CUSTOMER DEPOSITS                          | 9                   | (2,838,227)                | (2,078,519)          | (708,507)                     | (51,202)                      | 0                     | 0                     | 0                 |
| 4        | 252.00      | CUSTOMER BASED ADVANCES                    | Pg 22               | <u>1,569</u>               | <u>1,405</u>         | <u>126</u>                    | <u>26</u>                     | <u>6</u>              | <u>5</u>              | <u>1</u>          |
| 5        |             | TOTAL CUSTOMER-BASED RATE BASE             |                     | 1,093,251,765              | 983,105,924          | 85,524,627                    | 17,016,131                    | 4,061,711             | 3,251,497             | 291,876           |
| 6        |             | EQUITY CAPITAL @ 52.340%                   |                     | 572,207,974                | 514,557,641          | 44,763,590                    | 8,906,243                     | 2,125,899             | 1,701,834             | 152,768           |
| 7        |             | RETURN ON RATE BASE @ 8.100%               |                     | 88,553,393                 | 79,631,580           | 6,927,495                     | 1,378,307                     | 328,999               | 263,371               | 23,642            |
| 8        |             | RETURN ON EQUITY @ 10.950%                 |                     | 62,656,773                 | 56,344,062           | 4,901,613                     | 975,234                       | 232,786               | 186,351               | 16,728            |
| 9        | 303.30      | CUSTOMER & OTHER-BASED SOFTWARE [1]        | 11                  | 2,776,174                  | 2,198,674            | 242,971                       | 158,991                       | 103,440               | 70,876                | 1,222             |
| 10       | 376.00      | MAINS [2]                                  | 6                   | 19,166,771                 | 17,499,071           | 1,431,374                     | 212,751                       | 18,975                | 4,025                 | 575               |
| 11       | 376.00      | DIRECT - MAINS - MDS [2]                   |                     | 1,797                      | 0                    | 0                             | 0                             | 0                     | 0                     | 1,797             |
| 12       | 376.08      | MAINS-CSL REPLACEMENTS [2]                 | 6                   | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 13       | 376.30      | MAINS-BARE STEEL [2]                       | 6                   | 199,746                    | 182,366              | 14,917                        | 2,217                         | 198                   | 42                    | 6                 |
| 14       | 376.30      | DIRECT - MAINS-BARE STEEL [2]              |                     | 1,303                      | 0                    | 0                             | 0                             | 0                     | 0                     | 1,303             |
| 15       | 376.80      | MAINS-CAST IRON [2]                        | 6                   | 3,445                      | 3,146                | 257                           | 38                            | 3                     | 1                     | 0                 |
| 16       | 380.00      | SERVICES                                   | 15                  | 17,294,953                 | 15,711,946           | 1,319,951                     | 214,284                       | 31,650                | 17,122                | 0                 |
| 17       | 380.00      | DIRECT - SERVICES                          |                     | 49                         | 0                    | 0                             | 0                             | 0                     | 0                     | 49                |
| 18       | 380.12      | CSL REPLACEMENT                            | 15                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 19       | 381.00      | METERS                                     | 16                  | 937,707                    | 705,840              | 151,027                       | 70,581                        | 7,924                 | 2,213                 | 122               |
| 20       | 381.10      | AUTOMATIC METER READING                    | 16                  | 1,297,423                  | 976,609              | 208,963                       | 97,657                        | 10,963                | 3,062                 | 169               |
| 21       | 382.00      | METER INSTALLATIONS                        | 16                  | 825,547                    | 621,414              | 132,963                       | 62,139                        | 6,976                 | 1,948                 | 107               |
| 22       | 383.00      | HOUSE REGULATORS                           | 21                  | 298,012                    | 270,124              | 22,804                        | 4,476                         | 498                   | 98                    | 12                |
| 23       | 384.00      | HOUSE REG INSTALLATIONS                    | 21                  | 37,255                     | 33,769               | 2,851                         | 560                           | 62                    | 12                    | 1                 |
| 24       | 385.00      | IND M&R EQUIPMENT                          | 17                  | 437,919                    | 0                    | 11,789                        | 75,186                        | 153,403               | 197,541               | 0                 |
| 25       | 385.00      | DIRECT - IND M&R EQUIPMENT                 |                     | 11,470                     | 0                    | 0                             | 0                             | 0                     | 0                     | 11,470            |
| 26       | 385.10      | IND M&R EQUIPMENT - LG VOLUME              | 17                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 27       | 389-398     | GENERAL PLANT [3]                          | 11                  | <u>1,193,677</u>           | <u>945,368</u>       | <u>104,471</u>                | <u>68,362</u>                 | <u>44,476</u>         | <u>30,475</u>         | <u>525</u>        |
| 28       |             | TOTAL DEPRECIATION EXPENSES                |                     | 44,483,248                 | 39,148,327           | 3,644,338                     | 967,242                       | 378,568               | 327,415               | 17,358            |
| 29       |             | TOTAL NET SALVAGE AMORTIZED [3]            | 11                  | <u>2,895,129</u>           | <u>2,292,884</u>     | <u>253,382</u>                | <u>165,804</u>                | <u>107,872</u>        | <u>73,913</u>         | <u>1,274</u>      |
| 30       |             | TOTAL DEPRECIATION & AMORTIZATION EXPENSES |                     | <u>47,378,377</u>          | <u>41,441,211</u>    | <u>3,897,720</u>              | <u>1,133,046</u>              | <u>486,440</u>        | <u>401,328</u>        | <u>18,632</u>     |

[1] INTANGIBLE PLANT @ 61.018% OF GROSS PLANT, DEPRECIATION RESERVE, & DEPRECIATION EXPENSES. (PAGE 17)

[2] MAINS @ 49.690% OF GROSS PLANT, DEPRECIATION RESERVE, & DEPRECIATION EXPENSES. (PAGE 17)

[3] GENERAL PLANT & NET SALVAGE @ 61.018% 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, 2019

| ALLOCATED COST OF SERVICE<br>CUSTOMER/DEMAND |                    |                                                        |                        |                               |                      |                               |                               |                       |                       |                   | 111, SCHEDULE 1<br>PAGE 16 OF 31<br>WITNESS: M. P. BALMERT |
|----------------------------------------------|--------------------|--------------------------------------------------------|------------------------|-------------------------------|----------------------|-------------------------------|-------------------------------|-----------------------|-----------------------|-------------------|------------------------------------------------------------|
| LINE<br>NO.                                  | ACCT<br>NO.<br>(A) | ACCOUNT TITLE<br>(B)                                   | ALLOC<br>FACTOR<br>(C) | TOTAL<br>COMPANY<br>(D)<br>\$ | RSS/RDS<br>(E)<br>\$ | SGSS1/SCD1/SGDS1<br>(F)<br>\$ | SGSS2/SCD2/SGDS2<br>(G)<br>\$ | SDS/LGSS<br>(H)<br>\$ | LDS/LGSS<br>(I)<br>\$ | MLDS<br>(J)<br>\$ |                                                            |
| 1                                            | 870.00             | SUPERVISION & ENGINEERING [5]                          | Pg 21                  | 5,901,218                     | 5,229,901            | 482,183                       | 112,308                       | 38,150                | 38,164                | 512               |                                                            |
| 2                                            | 874.00             | MAINS & SERVICES [1]                                   | Pg 18                  | 11,394,510                    | 10,381,560           | 858,291                       | 132,314                       | 15,087                | 5,928                 | 1,330             |                                                            |
| 3                                            | 876.00             | M & R - INDUSTRIAL                                     | 17                     | 282,622                       | 1                    | 7,608                         | 48,523                        | 99,002                | 127,488               | 0                 |                                                            |
| 4                                            | 878.00             | METERS & HOUSE REGULATORS                              | 23                     | 2,617,608                     | 2,027,966            | 389,893                       | 174,437                       | 19,580                | 5,418                 | 314               |                                                            |
| 5                                            | 879.00             | CUSTOMER INSTALLATIONS                                 | 15                     | 6,830,672                     | 6,205,461            | 521,317                       | 84,632                        | 12,500                | 6,762                 | 0                 |                                                            |
| 6                                            | 880.00             | OTHER [5]                                              | Pg 21                  | 2,774,561                     | 2,458,929            | 226,707                       | 52,804                        | 17,937                | 17,943                | 241               |                                                            |
| 7                                            | 885.00             | SUPERVISION & ENGINEERING [5]                          | Pg 21                  | 101,209                       | 89,695               | 8,270                         | 1,926                         | 654                   | 655                   | 9                 |                                                            |
| 8                                            | 887.00             | MAINS [2]                                              | 13                     | 5,921,789                     | 5,405,660            | 442,168                       | 65,721                        | 5,862                 | 1,243                 | 1,135             |                                                            |
| 9                                            | 890.00             | M & R - INDUSTRIAL                                     | 17                     | 150,902                       | 1                    | 4,062                         | 25,908                        | 52,861                | 68,070                | 0                 |                                                            |
| 10                                           | 892.00             | SERVICES                                               | 15                     | 7,471,330                     | 6,787,478            | 570,212                       | 92,570                        | 13,673                | 7,397                 | 0                 |                                                            |
| 11                                           | 893.00             | METERS & HOUSE REGULATORS                              | 23                     | 505,241                       | 391,430              | 75,256                        | 33,669                        | 3,779                 | 1,046                 | 61                |                                                            |
| 12                                           | 894.00             | OTHER EQUIPMENT [5]                                    | Pg 21                  | <u>703,530</u>                | <u>623,497</u>       | <u>57,485</u>                 | <u>13,389</u>                 | <u>4,548</u>          | <u>4,550</u>          | <u>61</u>         |                                                            |
| 13                                           |                    | TOTAL DISTRIBUTION                                     |                        | 38,753,974                    | 34,371,678           | 3,161,269                     | 725,893                       | 245,483               | 246,500               | 3,151             |                                                            |
| 14                                           | 901.00             | SUPERVISION                                            | 6                      | 0                             | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |                                                            |
| 15                                           | 902.00             | METER READING                                          | 6                      | 686,852                       | 627,089              | 51,294                        | 7,624                         | 680                   | 144                   | 21                |                                                            |
| 16                                           | 903.00             | CUSTOMER RECORDS AND COLLECTION EXPENS                 | 6                      | 7,794,148                     | 7,115,979            | 582,067                       | 86,515                        | 7,716                 | 1,637                 | 234               |                                                            |
| 17                                           | 903.00             | INTEREST ON CUSTOMER DEPOSITS                          | 9                      | 108,514                       | 79,468               | 27,088                        | 1,958                         | 0                     | 0                     | 0                 |                                                            |
| 18                                           | 904.00             | UNCOLLECTIBLES-DIS REVENUE                             | 7                      | 4,410,259                     | 4,257,355            | 82,428                        | 70,476                        | 0                     | 0                     | 0                 |                                                            |
| 19                                           | 904.00             | UNCOLLECTIBLES-GMB/GTS REVENUE                         | 8                      | 323,417                       | (5)                  | 3,131                         | 14,897                        | 145,554               | 147,692               | 12,148            |                                                            |
| 20                                           | 905.00             | MISCELLANEOUS                                          | 6                      | 3,951                         | 3,607                | 295                           | 44                            | 4                     | 1                     | 0                 |                                                            |
| 21                                           | 921.00             | OFFICE SUPPLIES & EXPENSES                             | 6                      | 0                             | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |                                                            |
| 22                                           |                    | TOTAL CUSTOMER ACCOUNTS                                |                        | 13,327,141                    | 12,083,493           | 746,303                       | 181,514                       | 153,954               | 149,474               | 12,403            |                                                            |
| 23                                           | 907.00             | SUPERVISION                                            | 6                      | 0                             | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |                                                            |
| 24                                           | 908.00             | CUSTOMER ASSISTANCE                                    | 6                      | 20,892                        | 19,074               | 1,560                         | 232                           | 21                    | 4                     | 1                 |                                                            |
| 25                                           | 909.00             | INFORMATIONAL & INSTRUCTIONAL EXPENSES                 | 6                      | 203,522                       | 185,814              | 15,199                        | 2,259                         | 201                   | 43                    | 6                 |                                                            |
| 26                                           | 910.00             | MISCELLANEOUS                                          | 6                      | 1,024,093                     | 934,987              | 76,479                        | 11,367                        | 1,014                 | 215                   | 31                |                                                            |
| 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                       |                        | 1,248,507                     | 1,139,875            | 93,238                        | 13,858                        | 1,236                 | 262                   | 38                |                                                            |
| 31                                           | 912.00             | DEMONSTRATION                                          | 6                      | 605,075                       | 552,428              | 45,187                        | 6,716                         | 599                   | 127                   | 18                |                                                            |
| 32                                           | 913.00             | ADVERTISING                                            | 6                      | <u>274,671</u>                | <u>250,772</u>       | <u>20,512</u>                 | <u>3,049</u>                  | <u>272</u>            | <u>58</u>             | <u>8</u>          |                                                            |
| 33                                           |                    | TOTAL SALES                                            |                        | 879,746                       | 803,200              | 65,699                        | 9,765                         | 871                   | 185                   | 26                |                                                            |
| 34                                           | 920-931            | CUSTOMER-RELATED A&G [3]                               |                        | 37,058,895                    | 29,993,800           | 3,141,414                     | 1,764,190                     | 1,363,254             | 782,596               | 13,643            |                                                            |
| 35                                           |                    | TOTAL CUST-RELATED O&M [LINES 13, 21, 30, 33 & 34]     |                        | 91,268,265                    | 78,392,046           | 7,207,923                     | 2,695,220                     | 1,764,798             | 1,179,017             | 29,261            |                                                            |
| 36                                           |                    | DEPRECIATION & AMORTIZATION EXPENSE [PAGE 15, LINE 30] |                        | 47,378,377                    | 41,441,211           | 3,897,720                     | 1,133,046                     | 486,440               | 401,328               | 18,632            |                                                            |
| 37                                           |                    | INCOME TAXES                                           |                        | 25,458,293                    | 22,893,353           | 1,991,592                     | 396,251                       | 94,584                | 75,717                | 6,797             |                                                            |
| 38                                           |                    | RETURN ON RATE BASE [PAGE 15, LINE 7]                  |                        | 88,553,394                    | 79,631,580           | 6,927,495                     | 1,378,307                     | 328,999               | 263,371               | 23,642            |                                                            |
| 39                                           |                    | TOTAL ANNUAL CUSTOMER-BASED COST                       |                        | <u>252,658,329</u>            | <u>222,358,190</u>   | <u>20,024,730</u>             | <u>5,602,824</u>              | <u>2,674,821</u>      | <u>1,919,433</u>      | <u>78,332</u>     |                                                            |
| 40                                           |                    | AVERAGE ANNUAL CUSTOMER BILLS [4]                      |                        | 5,283,795                     | 4,828,182            | 391,250                       | 57,979                        | 5,168                 | 1,082                 | 134               |                                                            |
| 41                                           |                    | MONTHLY SYSTEM BASED CHARGE/BILL                       |                        | \$ 47.82                      | \$ 46.05             | \$ 51.18                      | \$ 96.64                      | \$ 517.57             | \$1,773.97            | \$ 584.57         |                                                            |

[1] MAINS AND SERVICES @ 62.122% OF TOTAL ACCOUNT 874. (PAGE 18)

[2] MAINS @ 49.690% OF ACCOUNT 887. (PAGE 17)

[3] CUSTOMER-RELATED A&G @ 45.737% OF A&G (PAGE 20).

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

[5] CUSTOMER-RELATED (SEE WORKPAPER).

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, 2019

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1

PAGE 17 OF 31

WITNESS: M. P. BALMERT

| LINE NO. | ACCT NO.<br>(A) | ACCOUNT TITLE<br>(B)                                           | ALLOC FACTOR<br>(C) | TOTAL COMPANY<br>(D)<br>\$ | RSS/RDS<br>(E)<br>\$ | SGSS1/SCD1/SGDS1<br>(F)<br>\$ | SGSS2/SCD2/SGDS2<br>(G)<br>\$ | SDS/LGSS<br>(H)<br>\$ | LDS/LGSS<br>(I)<br>\$ | MLDS<br>(J)<br>\$ |
|----------|-----------------|----------------------------------------------------------------|---------------------|----------------------------|----------------------|-------------------------------|-------------------------------|-----------------------|-----------------------|-------------------|
| 1        |                 | TOTAL GROSS PLANT LESS GENERAL & INTANGIBLE PLANT [1]          |                     | 2,652,888,586              |                      |                               |                               |                       |                       |                   |
| 2        |                 | LOW PRESSURE - ALL PIPE                                        | Alloc 20            | 258,371,148.22             |                      |                               |                               |                       |                       |                   |
| 3        |                 | REGULATED PRESSURE - ALL PIPE                                  | Alloc 20            | 570,958,138.37             |                      |                               |                               |                       |                       |                   |
| 4        |                 | REMAINING REGULATED PRESSURE - ALL PIPE                        | Alloc 20            | 238,639,304.79             |                      |                               |                               |                       |                       |                   |
| 5        |                 | TRANSMISSION - ALL PIPE                                        | Alloc 20            | <u>23,091,667.66</u>       |                      |                               |                               |                       |                       |                   |
| 6        |                 | TOTAL                                                          |                     | 1,091,060,259.04           |                      |                               |                               |                       |                       |                   |
| 7        |                 | LOW PRESSURE Unit Cost of 2" x All Pipe Footage                | Alloc 20            | 123,765,664.91             |                      |                               |                               |                       |                       |                   |
| 8        |                 | REGULATED PRESSURE Unit Cost of 2" x All Pipe Footage          | Alloc 20            | 326,131,565.76             |                      |                               |                               |                       |                       |                   |
| 9        |                 | REMAINING REGULATED PRESSURE Unit Cost of 2" x All Pipe Fo     | Alloc 20            | 92,253,877.73              |                      |                               |                               |                       |                       |                   |
| 10       |                 | TRANSMISSION Unit Cost of 2" x All Pipe Footage                | Alloc 20            | 0.00                       |                      |                               |                               |                       |                       |                   |
| 11       |                 | TOTAL                                                          |                     | 542,151,108.40             |                      |                               |                               |                       |                       |                   |
| 12       |                 | CUSTOMER COMPONENT-MAINS [2]:                                  |                     | 49.690%                    |                      |                               |                               |                       |                       |                   |
| 13       | 376.00          | MAINS [2]                                                      | Pg 14               | 851,637,367                |                      |                               |                               |                       |                       |                   |
| 14       | 376.00          | DIRECT - MAINS - MDS [2]                                       | Pg 14               | 104,774                    |                      |                               |                               |                       |                       |                   |
| 15       | 376.08          | MAINS-CSL REPLACEMENTS [2]                                     | Pg 14               | 11,806,428                 |                      |                               |                               |                       |                       |                   |
| 16       | 376.30          | MAINS-BARE STEEL [2]                                           | Pg 14               | 33,075,630                 |                      |                               |                               |                       |                       |                   |
| 17       | 376.30          | DIRECT - MAINS-BARE STEEL [2]                                  | Pg 14               | 40,173                     |                      |                               |                               |                       |                       |                   |
| 18       | 376.80          | MAINS-CAST IRON [2]                                            | Pg 14               | 199,155                    |                      |                               |                               |                       |                       |                   |
| 19       | 380.00          | SERVICES                                                       | Pg 14               | 592,415,097                |                      |                               |                               |                       |                       |                   |
| 20       | 380.00          | DIRECT - SERVICES                                              | Pg 14               | 1,966                      |                      |                               |                               |                       |                       |                   |
| 21       | 380.12          | CSL REPLACEMENT                                                | Pg 14               | -                          |                      |                               |                               |                       |                       |                   |
| 22       | 381.00          | METERS                                                         | Pg 14               | 40,150,510                 |                      |                               |                               |                       |                       |                   |
| 23       | 381.10          | AUTOMATIC METER READING                                        | Pg 14               | 19,350,242                 |                      |                               |                               |                       |                       |                   |
| 24       | 382.00          | METER INSTALLATIONS                                            | Pg 14               | 43,214,952                 |                      |                               |                               |                       |                       |                   |
| 25       | 383.00          | HOUSE REGULATORS                                               | Pg 14               | 13,305,976                 |                      |                               |                               |                       |                       |                   |
| 26       | 384.00          | HOUSE REG INSTALLATIONS                                        | Pg 14               | 3,864,772                  |                      |                               |                               |                       |                       |                   |
| 27       | 385.00          | IND M&R EQUIPMENT                                              | Pg 14               | 8,110,311                  |                      |                               |                               |                       |                       |                   |
| 28       | 385.00          | DIRECT - IND M&R EQUIPMENT                                     | Pg 14               | 373,618                    |                      |                               |                               |                       |                       |                   |
| 29       | 385.10          | IND M&R EQUIPMENT - LG VOLUME                                  | Pg 14               | <u>1,085,273</u>           |                      |                               |                               |                       |                       |                   |
| 30       |                 | CUSTOMER-RELATED GROSS PLANT                                   |                     | 1,618,736,243              |                      |                               |                               |                       |                       |                   |
| 31       |                 | GENERAL PLANT                                                  | Pg 3                | 31,812,773                 |                      |                               |                               |                       |                       |                   |
| 32       |                 | GENERAL PLANT CUSTOMER-RELATED COSTS PCT [Line 30 / Line 1]    |                     | <u>61.018%</u>             |                      |                               |                               |                       |                       |                   |
| 33       |                 | CUSTOMER-RELATED GENERAL PLANT                                 |                     | <u>19,411,518</u>          |                      |                               |                               |                       |                       |                   |
| 34       |                 | INTANGIBLE PLANT [ACCOUNT 303.3 ONLY]                          | Pg 3                | 35,849,130                 |                      |                               |                               |                       |                       |                   |
| 35       |                 | INTANGIBLE PLANT CUSTOMER-RELATED COSTS PCT [Line 30 / Line 1] |                     | <u>61.018%</u>             |                      |                               |                               |                       |                       |                   |
| 36       |                 | CUSTOMER-RELATED INTANGIBLE PLANT                              |                     | <u>21,874,422</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, 2019

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1  
PAGE 18 OF 31  
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)     |
|          |          |                                         |              | \$            | \$                 | \$               | \$               | \$        | \$       | \$      |
|          |          |                                         |              | TOTAL PLANT   | CUSTOMER COMPONENT | CUSTOMER-RELATED |                  |           |          |         |
| 1        | 376.00   | MAINS                                   | Pg 3         | 1,713,900,920 |                    |                  |                  |           |          |         |
| 2        | 376.00   | DIRECT - MAINS - MDS                    | Pg 3         | 210,855       |                    |                  |                  |           |          |         |
| 3        | 376.08   | MAINS-CSL REPLACEMENTS                  | Pg 3         | 23,760,169    |                    |                  |                  |           |          |         |
| 4        | 376.30   | MAINS-BARE STEEL                        | Pg 3         | 66,563,956    |                    |                  |                  |           |          |         |
| 5        | 376.30   | DIRECT - MAINS-BARE STEEL               | Pg 3         | 80,847        |                    |                  |                  |           |          |         |
| 6        | 376.80   | MAINS-CAST IRON                         | Pg 3         | 400,795       |                    |                  |                  |           |          |         |
| 7        |          | TOTAL MAINS                             |              | 1,804,917,543 | 49.690%            | 896,863,527      |                  |           |          |         |
| 8        | 380.00   | SERVICES                                | Pg 3         | 592,415,097   |                    |                  |                  |           |          |         |
| 9        | 380.12   | CSL REPLACEMENT                         | Pg 3         | 0             |                    |                  |                  |           |          |         |
| 10       |          | TOTAL SERVICES                          |              | 592,415,097   | 100.000%           | 592,415,097      |                  |           |          |         |
| 11       |          | TOTAL MAINS AND SERVICES                |              | 2,397,332,640 | 62.122%            | 1,489,278,624    |                  |           |          |         |
| 12       |          | TOTAL ACCOUNT 874                       | Pg 7         |               |                    | 18,342,149       |                  |           |          |         |
| 13       |          | PERCENTAGE CUSTOMER-RELATED (Line 12)   |              |               |                    | 62.122%          |                  |           |          |         |
| 14       |          | CUSTOMER-RELATED ACCOUNT 874            |              |               |                    | 11,394,510       |                  |           |          |         |
| 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                    | Pg14         | 896,863,527   | 818,695,098        | 66,966,944       | 9,953,576        | 887,751   | 188,311  | 171,848 |
| 16       |          | Services                                | Pg14         | 592,417,063   | 538,191,343        | 45,213,120       | 7,340,023        | 1,084,120 | 586,491  | 1,966   |
| 17       |          | Total Customer Based Mains and Services |              | 1,489,280,590 | 1,356,886,441      | 112,180,064      | 17,293,599       | 1,971,871 | 774,802  | 173,814 |
|          |          |                                         |              | 100.000%      | 91.110%            | 7.533%           | 1.161%           | 0.132%    | 0.052%   | 0.012%  |
| 18       |          | Account 874                             | Line 14      | 11,394,510    |                    |                  |                  |           |          |         |
| 19       |          | CUSTOMER BASED ACCOUNT 874              |              | 11,394,510    | 10,381,560         | 858,291          | 132,314          | 15,087    | 5,928    | 1,330   |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
CUSTOMER BASED COSTS - CUSTOMER CHARGE CALCULATION WITH MAINS COMPONENT  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1

PAGE 19 OF 31

WITNESS: M. P. BALMERT

| LINE<br>NO. | ACCT<br>NO.<br>(A) | ACCOUNT TITLE<br>(B)         | ALLOC<br>FACTOR<br>(C) | TOTAL<br>COMPANY<br>(D)<br>\$ | RSS/RDS<br>(E)<br>\$   | SGSS1/SCD1/SGDS1<br>(F)<br>\$ | SGSS2/SCD2/SGDS2<br>(G)<br>\$ | SDS/LGSS<br>(H)<br>\$ | LDS/LGSS<br>(I)<br>\$ | MLDS<br>(J)<br>\$ |
|-------------|--------------------|------------------------------|------------------------|-------------------------------|------------------------|-------------------------------|-------------------------------|-----------------------|-----------------------|-------------------|
| 1           |                    | TOTAL ACCOUNT 887            | Pg 7                   | 11,917,466                    |                        |                               |                               |                       |                       |                   |
| 2           |                    | PERCENTAGE CUSTOMER-RELATED  | Pg 18                  | 49.690%                       |                        |                               |                               |                       |                       |                   |
| 3           |                    | CUSTOMER-RELATED ACCOUNT 887 |                        | 5,921,789                     |                        |                               |                               |                       |                       |                   |
| 4           |                    | Total Customer Based Mains   | Pg 18                  | 896,863,527<br>100.000%       | 818,695,098<br>91.284% | 66,966,944<br>7.467%          | 9,953,576<br>1.110%           | 887,751<br>0.099%     | 188,311<br>0.021%     | 171,848<br>0.019% |
| 5           |                    | Account 887                  |                        | 5,921,789                     |                        |                               |                               |                       |                       |                   |
| 6           |                    | CUSTOMER BASED ACCOUNT 887   |                        | 5,921,789                     | 5,405,660              | 442,168                       | 65,721                        | 5,862                 | 1,243                 | 1,135             |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
CUSTOMER BASED COSTS - CUSTOMER CHARGE CALCULATION WITH MAINS COMPONENT - A&G EXPENSE  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1  
PAGE 20 OF 31  
WITNESS: M. P. BALMERT

| LINE<br>NO. | ACCT<br>NO.<br>(A) | ACCOUNT TITLE<br>(B)                              | ALLOC<br>FACTOR<br>(C) | TOTAL<br>COMPANY<br>(D)<br>\$ | RSS/RDS<br>(E)<br>\$ | SGSS1/SCD1/SGDS1<br>(F)<br>\$ | SGSS2/SCD2/SGDS2<br>(G)<br>\$ | SDS/LGSS<br>(H)<br>\$ | LDS/LGSS<br>(I)<br>\$ | MLDS<br>(J)<br>\$ |
|-------------|--------------------|---------------------------------------------------|------------------------|-------------------------------|----------------------|-------------------------------|-------------------------------|-----------------------|-----------------------|-------------------|
| 1           |                    | TOTAL O & M LESS GAS PURCHASED COST AND A&G       | Pg 7/8                 | 109,991,182                   |                      |                               |                               |                       |                       |                   |
| 2           | 874.00             | MAINS & SERVICES                                  | Pg 16                  | 11,394,510                    |                      |                               |                               |                       |                       |                   |
| 3           | 876.00             | M & R - INDUSTRIAL                                | Pg 16                  | 282,622                       |                      |                               |                               |                       |                       |                   |
| 4           | 878.00             | METERS & HOUSE REGULATORS                         | Pg 16                  | 2,617,608                     |                      |                               |                               |                       |                       |                   |
| 5           | 879.00             | CUSTOMER INSTALLATIONS                            | Pg 16                  | 6,830,672                     |                      |                               |                               |                       |                       |                   |
| 6           | 887.00             | MAINS                                             | Pg 16                  | 5,921,789                     |                      |                               |                               |                       |                       |                   |
| 7           | 890.00             | M & R - INDUSTRIAL                                | Pg 16                  | 150,902                       |                      |                               |                               |                       |                       |                   |
| 8           | 892.00             | SERVICES                                          | Pg 16                  | 7,471,330                     |                      |                               |                               |                       |                       |                   |
| 9           | 893.00             | METERS & HOUSE REGULATORS                         | Pg 16                  | 505,241                       |                      |                               |                               |                       |                       |                   |
| 10          | 901.00             | SUPERVISION                                       | Pg 16                  | 0                             |                      |                               |                               |                       |                       |                   |
| 11          | 902.00             | METER READING                                     | Pg 16                  | 686,852                       |                      |                               |                               |                       |                       |                   |
| 12          | 903.00             | CUSTOMER RECORDS AND COLLECTION EXPENSES          | Pg 16                  | 7,794,148                     |                      |                               |                               |                       |                       |                   |
| 13          | 903.00             | INTEREST ON CUSTOMER DEPOSITS                     | Pg 16                  | 108,514                       |                      |                               |                               |                       |                       |                   |
| 14          | 904.00             | UNCOLLECTIBLES-DIS REVENUE                        | Pg 16                  | 4,410,259                     |                      |                               |                               |                       |                       |                   |
| 15          | 905.00             | MISCELLANEOUS                                     | Pg 16                  | 3,951                         |                      |                               |                               |                       |                       |                   |
| 16          | 921.00             | OFFICE SUPPLIES & EXPENSES                        | Pg 16                  | 0                             |                      |                               |                               |                       |                       |                   |
| 17          | 907.00             | SUPERVISION                                       | Pg 16                  | 0                             |                      |                               |                               |                       |                       |                   |
| 18          | 908.00             | CUSTOMER ASSISTANCE                               | Pg 16                  | 20,892                        |                      |                               |                               |                       |                       |                   |
| 19          | 909.00             | INFORMATIONAL & INSTRUCTIONAL EXPENSES            | Pg 16                  | 203,522                       |                      |                               |                               |                       |                       |                   |
| 20          | 910.00             | MISCELLANEOUS                                     | Pg 16                  | 1,024,093                     |                      |                               |                               |                       |                       |                   |
| 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                  | 605,075                       |                      |                               |                               |                       |                       |                   |
| 25          | 913.00             | ADVERTISING                                       | Pg 16                  | 274,671                       |                      |                               |                               |                       |                       |                   |
| 26          |                    | CUSTOMER-RELATED O&M LESS A&G                     |                        | 50,306,651                    |                      |                               |                               |                       |                       |                   |
| 27          |                    | ADMINISTRATIVE & GENERAL                          | Pg 8                   | 81,026,074                    |                      |                               |                               |                       |                       |                   |
| 28          |                    | A&G CUSTOMER-RELATED COSTS PCT [Line 27 / Line 1] |                        | 45.74%                        |                      |                               |                               |                       |                       |                   |
| 29          |                    | CUSTOMER-RELATED A&G                              |                        | 37,058,895                    |                      |                               |                               |                       |                       |                   |



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, 2019

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1

PAGE 21 OF 31

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        | 11,394,510     | 10,381,560     | 858,291          | 132,314          | 15,087         | 5,928          | 1,330          |
| 3        | 876.00   | M & R - INDUSTRIAL                              | Pg 16        | 282,622        | 1              | 7,608            | 48,523           | 99,002         | 127,488        | 0              |
| 4        | 878.00   | METERS & HOUSE REGULATORS                       | Pg 16        | 2,617,608      | 2,027,966      | 389,893          | 174,437          | 19,580         | 5,418          | 314            |
| 5        | 879.00   | CUSTOMER INSTALLATIONS                          | Pg 16        | 6,830,672      | 6,205,461      | 521,317          | 84,632           | 12,500         | 6,762          | 0              |
| 6        | 887.00   | MAINS                                           | Pg 16        | 5,921,789      | 5,405,660      | 442,168          | 65,721           | 5,862          | 1,243          | 1,135          |
| 7        | 890.00   | M & R - INDUSTRIAL                              | Pg 16        | 150,902        | 1              | 4,062            | 25,908           | 52,861         | 68,070         | 0              |
| 8        | 892.00   | SERVICES                                        | Pg 16        | 7,471,330      | 6,787,478      | 570,212          | 92,570           | 13,673         | 7,397          | 0              |
| 9        | 893.00   | METERS & HOUSE REGULATORS                       | Pg 16        | <u>505,241</u> | <u>391,430</u> | <u>75,256</u>    | <u>33,669</u>    | <u>3,779</u>   | <u>1,046</u>   | <u>61</u>      |
| 10       |          | TOTAL                                           |              | 35,174,674     | 31,199,557     | 2,868,807        | 657,774          | 222,344        | 223,352        | 2,840          |
| 11       |          | TOTAL COMPANY EXPENSES                          |              |                |                |                  |                  |                |                |                |
| 12       | 874.00   | MAINS & SERVICES                                | Pg 7         | 18,342,149     | 14,628,231     | 1,553,947        | 1,023,859        | 679,760        | 454,152        | 2,201          |
| 13       | 876.00   | M & R - INDUSTRIAL                              | Pg 7         | 282,622        | (0)            | 7,608            | 48,523           | 99,003         | 127,488        | 0              |
| 14       | 878.00   | METERS & HOUSE REGULATORS                       | Pg 7         | 2,617,608      | 2,027,966      | 389,893          | 174,437          | 19,580         | 5,418          | 314            |
| 15       | 879.00   | CUSTOMER INSTALLATIONS                          | Pg 7         | 6,830,672      | 6,205,461      | 521,317          | 84,632           | 12,500         | 6,762          | 0              |
| 16       | 887.00   | MAINS                                           | Pg 7         | 11,917,466     | 9,070,503      | 1,042,540        | 835,057          | 579,427        | 388,033        | 1,907          |
| 17       | 890.00   | M & R - INDUSTRIAL                              | Pg 7         | 150,902        | 0              | 4,062            | 25,908           | 52,861         | 68,070         | 0              |
| 18       | 892.00   | SERVICES                                        | Pg 7         | 7,471,330      | 6,787,479      | 570,212          | 92,570           | 13,673         | 7,397          | 0              |
| 19       | 893.00   | METERS & HOUSE REGULATORS                       | Pg 7         | <u>505,241</u> | <u>391,431</u> | <u>75,256</u>    | <u>33,669</u>    | <u>3,779</u>   | <u>1,046</u>   | <u>61</u>      |
| 20       |          | TOTAL                                           |              | 48,117,990     | 39,111,069     | 4,164,834        | 2,318,656        | 1,460,582      | 1,058,366      | 4,483          |
| 21       |          | PERCENTAGE CUSTOMER RELATED (LINE 11 / LINE 21) |              | 73.101%        | 79.772%        | 68.882%          | 28.369%          | 15.223%        | 21.103%        | 63.356%        |
| 22       |          | TOTAL COMPANY EXPENSES                          |              |                |                |                  |                  |                |                |                |
| 23       | 870.00   | SUPERVISION & ENGINEERING                       | Pg 7         | 8,084,222      | 6,556,062      | 700,013          | 395,884          | 250,611        | 180,844        | 808            |
| 24       |          | PERCENTAGE CUSTOMER RELATED                     |              |                | <u>79.772%</u> | <u>68.882%</u>   | <u>28.369%</u>   | <u>15.223%</u> | <u>21.103%</u> | <u>63.356%</u> |
| 25       | 870.00   | SUPERVISION & ENGINEERING CUSTOMER RELATED      |              | 5,901,218      | 5,229,901      | 482,183          | 112,308          | 38,150         | 38,164         | 512            |
| 26       | 880.00   | OTHER                                           | Pg 7         | 3,800,938      | 3,082,447      | 329,123          | 186,132          | 117,829        | 85,027         | 380            |
| 27       |          | PERCENTAGE CUSTOMER RELATED                     |              |                | <u>79.772%</u> | <u>68.882%</u>   | <u>28.369%</u>   | <u>15.223%</u> | <u>21.103%</u> | <u>63.356%</u> |
| 28       | 880.00   | OTHER CUSTOMER RELATED                          |              | 2,774,561      | 2,458,929      | 226,707          | 52,804           | 17,937         | 17,943         | 241            |
| 29       | 885.00   | SUPERVISION & ENGINEERING                       | Pg 7         | 138,648        | 112,439        | 12,006           | 6,790            | 4,298          | 3,102          | 14             |
| 30       |          | PERCENTAGE CUSTOMER RELATED                     |              |                | <u>79.772%</u> | <u>68.882%</u>   | <u>28.369%</u>   | <u>15.223%</u> | <u>21.103%</u> | <u>63.356%</u> |
| 31       | 885.00   | SUPERVISION & ENGINEERING CUSTOMER RELATED      |              | 101,209        | 89,695         | 8,270            | 1,926            | 654            | 655            | 9              |
| 32       | 894.00   | OTHER EQUIPMENT                                 | Pg 7         | 963,782        | 781,598        | 83,454           | 47,196           | 29,877         | 21,560         | 96             |
| 33       |          | PERCENTAGE CUSTOMER RELATED                     |              |                | <u>79.772%</u> | <u>68.882%</u>   | <u>28.369%</u>   | <u>15.223%</u> | <u>21.103%</u> | <u>63.356%</u> |
| 34       | 894.00   | OTHER EQUIPMENT CUSTOMER RELATED                |              | 703,530        | 623,497        | 57,485           | 13,389           | 4,548          | 4,550          | 61             |

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, 2019

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1  
PAGE 22 OF 31  
WITNESS: M. P. BALMERT

| LINE NO. | ACCT NO.<br>(A) | ACCOUNT TITLE<br>(B)                                            | ALLOC FACTOR<br>(C) | TOTAL COMPANY<br>(D) | RSS/RDS<br>(E)       | SGSS1/SCD1/SGDS1<br>(F) | SGSS2/SCD2/SGDS2<br>(G) | SDS/LGSS<br>(H)    | LDS/LGSS<br>(I)  | MLDS<br>(J)     |
|----------|-----------------|-----------------------------------------------------------------|---------------------|----------------------|----------------------|-------------------------|-------------------------|--------------------|------------------|-----------------|
| 1        |                 | Total Gross Plant                                               | Pg 12               | 2,737,191,110        | 2,167,432,993        | 239,832,976             | 157,044,088             | 101,876,259        | 69,741,803       | 1,262,992       |
| 2        |                 | Customer Based Gross Plant                                      | Pg 14               | 1,660,022,183        | 1,482,465,181        | 133,898,251             | 29,226,150              | 7,628,021          | 6,224,943        | 579,638         |
| 3        |                 | Percent                                                         |                     | 100.000%             | 89.304%              | 8.066%                  | 1.761%                  | 0.460%             | 0.375%           | 0.035%          |
| 4        |                 | Customer Based Gross Plant to Total Gross Plant                 |                     | 60.647%              |                      |                         |                         |                    |                  |                 |
| 5        |                 | Total Deferred Income Taxes                                     | Pg 10               | (381,731,924)        |                      |                         |                         |                    |                  |                 |
| 6        |                 | <b>CUSTOMER BASED DEFERRED INCOME TAXES</b>                     |                     | <b>(231,508,666)</b> | <b>(206,746,356)</b> | <b>(18,673,609)</b>     | <b>(4,075,914)</b>      | <b>(1,063,813)</b> | <b>(868,138)</b> | <b>(80,837)</b> |
| 7        |                 | DIST. PLANT EXCL ACCTS 375.70, 375.71, & 387                    | Pg 12               | 2,632,013,410        | 2,084,467,771        | 230,362,553             | 150,724,980             | 98,080,576         | 67,207,147       | 1,170,384       |
| 8        |                 | Customer Based Dist Plant Excl 375.7, 375.71.387                | Pg 14               | 1,618,736,244        | 1,449,767,542        | 130,284,906             | 26,861,704              | 6,089,707          | 5,170,913        | 561,472         |
| 9        |                 | Percent                                                         |                     | 100.000%             | 89.562%              | 8.049%                  | 1.659%                  | 0.376%             | 0.319%           | 0.035%          |
| 10       |                 | Customer Based Gross Plant to Dist Plant Excl 375.7, 375.71.387 |                     | 61.502%              |                      |                         |                         |                    |                  |                 |
| 11       |                 | Materials & Supplies                                            |                     | 851,388              |                      |                         |                         |                    |                  |                 |
| 12       |                 | <b>CUSTOMER BASED MATERIALS &amp; SUPPLIES</b>                  |                     | <b>523,619</b>       | <b>468,962</b>       | <b>42,144</b>           | <b>8,689</b>            | <b>1,970</b>       | <b>1,673</b>     | <b>182</b>      |
| 13       |                 | DIST. PLANT EXCL ACCTS 375.70, 375.71, & 387                    | Pg 12               | 2,632,013,410        | 2,084,467,771        | 230,362,553             | 150,724,980             | 98,080,576         | 67,207,147       | 1,170,384       |
| 14       |                 | Customer Based Dist Plant Excl 375.7, 375.71.387                |                     | 1,618,736,244        | 1,449,767,542        | 130,284,906             | 26,861,704              | 6,089,707          | 5,170,913        | 561,472         |
| 15       |                 | Percent                                                         |                     | 100.000%             | 89.562%              | 8.049%                  | 1.659%                  | 0.376%             | 0.319%           | 0.035%          |
| 16       |                 | Customer Based Gross Plant to Dist Plant Excl 375.7, 375.71.387 |                     | 61.502%              |                      |                         |                         |                    |                  |                 |
| 17       |                 | Customer Advances                                               | Pg 10               | 2,552                |                      |                         |                         |                    |                  |                 |
| 18       |                 | <b>CUSTOMER BASED ADVANCES</b>                                  |                     | <b>1,569</b>         | <b>1,405</b>         | <b>126</b>              | <b>26</b>               | <b>6</b>           | <b>5</b>         | <b>1</b>        |

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**CUSTOMER BASED COSTS - CUSTOMER CHARGE CALCULATION EXCLUDING MAINS**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019**

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

**111, SCHEDULE 1**  
**PAGE 23 OF 31**  
**WITNESS: M. P. BALMERT**

| <u>LINE NO.</u> | <u>ACCT NO.</u> | <u>ACCOUNT TITLE</u>                | <u>ALLOC FACTOR</u> | <u>TOTAL COMPANY</u> | <u>RSS/RDS</u> | <u>SGSS1/SCD1/SGDS1</u> | <u>SGSS2/SCD2/SGDS2</u> | <u>SDS/LGSS</u> | <u>LDS/LGSS</u> | <u>MLDS</u> |
|-----------------|-----------------|-------------------------------------|---------------------|----------------------|----------------|-------------------------|-------------------------|-----------------|-----------------|-------------|
|                 |                 | (A)                                 | (B)                 | (C)                  | (D)            | (E)                     | (F)                     | (G)             | (I)             | (J)         |
|                 |                 |                                     |                     | \$                   | \$             | \$                      | \$                      | \$              | \$              | \$          |
| 1               | 303.30          | CUSTOMER & OTHER-BASED SOFTWARE [1] | 11                  | 9,754,907            | 7,725,691      | 853,749                 | 558,664                 | 363,468         | 249,043         | 4,292       |
| 2               | 380.00          | SERVICES                            | 15                  | 592,415,097          | 538,191,343    | 45,213,120              | 7,340,023               | 1,084,120       | 586,491         | 0           |
| 3               | 380.00          | DIRECT - SERVICES                   | Pg 14               | 1,966                | 0              | 0                       | 0                       | 0               | 0               | 1,966       |
| 4               | 380.12          | CSL REPLACEMENT                     | 15                  | 0                    | 0              | 0                       | 0                       | 0               | 0               | 0           |
| 5               | 381.00          | METERS                              | 16                  | 40,150,510           | 30,222,493     | 6,466,641               | 3,022,129               | 339,272         | 94,755          | 5,220       |
| 6               | 381.10          | AUTOMATIC METER READING             | 16                  | 19,350,242           | 14,565,506     | 3,116,550               | 1,456,493               | 163,510         | 45,667          | 2,516       |
| 7               | 382.00          | METER INSTALLATIONS                 | 16                  | 43,214,952           | 32,529,192     | 6,960,200               | 3,252,789               | 365,166         | 101,987         | 5,618       |
| 8               | 383.00          | HOUSE REGULATORS                    | 21                  | 13,305,976           | 12,060,803     | 1,018,173               | 199,856                 | 22,221          | 4,391           | 532         |
| 9               | 384.00          | HOUSE REG INSTALLATIONS             | 21                  | 3,864,772            | 3,503,107      | 295,732                 | 58,049                  | 6,454           | 1,275           | 155         |
| 10              | 385.00          | IND M&R EQUIPMENT                   | 17                  | 8,110,311            | 0              | 218,330                 | 1,392,459               | 2,841,042       | 3,658,480       | 0           |
| 11              | 385.00          | DIRECT - IND M&R EQUIPMENT          |                     | 373,618              | 0              | 0                       | 0                       | 0               | 0               | 373,618     |
| 12              | 385.10          | IND M&R EQUIPMENT - LG VOLUME       | 17                  | <u>1,085,273</u>     | <u>(1)</u>     | <u>29,216</u>           | <u>186,331</u>          | <u>380,171</u>  | <u>489,556</u>  | <u>0</u>    |
| 13              |                 | TOTAL GROSS PLANT                   |                     | 731,627,623          | 638,798,134    | 64,171,711              | 17,466,793              | 5,565,424       | 5,231,645       | 393,917     |
| 14              | 303.30          | CUSTOMER & OTHER-BASED SOFTWARE [1] | 11                  | 4,232,304            | 3,351,900      | 370,411                 | 242,384                 | 157,696         | 108,051         | 1,862       |
| 15              | 380.00          | SERVICES                            | 15                  | 135,665,837          | 123,248,343    | 10,354,017              | 1,680,900               | 248,268         | 134,309         | 0           |
| 16              | 380.00          | DIRECT - SERVICES                   | Pg 14               | 1,920                | 0              | 0                       | 0                       | 0               | 0               | 1,920       |
| 17              | 380.12          | CSL REPLACEMENT                     | 15                  | 0                    | 0              | 0                       | 0                       | 0               | 0               | 0           |
| 18              | 381.00          | METERS                              | 16                  | 17,411,447           | 13,106,118     | 2,804,288               | 1,310,560               | 147,127         | 41,091          | 2,263       |
| 19              | 381.10          | AUTOMATIC METER READING             | 16                  | 13,729,683           | 10,334,744     | 2,211,303               | 1,033,433               | 116,016         | 32,402          | 1,785       |
| 20              | 382.00          | METER INSTALLATIONS                 | 16                  | 13,549,487           | 10,199,106     | 2,182,280               | 1,019,870               | 114,493         | 31,977          | 1,761       |
| 21              | 383.00          | HOUSE REGULATORS                    | 21                  | 4,334,095            | 3,928,511      | 331,645                 | 65,098                  | 7,238           | 1,430           | 173         |
| 22              | 384.00          | HOUSE REG INSTALLATIONS             | 21                  | 3,112,325            | 2,821,074      | 238,155                 | 46,747                  | 5,198           | 1,027           | 124         |
| 23              | 385.00          | IND M&R EQUIPMENT                   | 17                  | 3,051,516            | 0              | 82,147                  | 523,915                 | 1,068,946       | 1,376,508       | 0           |
| 24              | 385.00          | DIRECT - IND M&R EQUIPMENT          | Pg 14               | 110,824              | 0              | 0                       | 0                       | 0               | 0               | 110,824     |
| 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          |                     | 195,199,438          | 166,989,796    | 18,574,246              | 5,922,907               | 1,864,982       | 1,726,795       | 120,712     |

[1] INTANGIBLE PLANT @ 27.211% 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, 2019**

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

111, SCHEDULE 1  
PAGE 24 OF 31  
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)       | (I)       | (J)      |
|          |             |                                            |              | \$            | \$           | \$               | \$               | \$        | \$        | \$       |
| 1        | 154.00      | CUSTOMER BASED MATERIALS & SUPPLIES        | Pg 30        | 233,507       | 204,135      | 20,482           | 5,469            | 1,683     | 1,612     | 126      |
| 2        | 190-282-283 | CUSTOMER BASED DEFERRED INCOME TAXE        | Pg 30        | (102,033,658) | (89,087,547) | (8,949,463)      | (2,435,940)      | (776,161) | (729,611) | (54,936) |
| 3        | 235.00      | CUSTOMER DEPOSITS                          | 9            | (2,838,227)   | (2,078,518)  | (708,507)        | (51,202)         | 0         | 0         | 0        |
| 4        | 252.00      | CUSTOMER BASED ADVANCES                    | Pg 30        | 700           | 612          | 61               | 16               | 5         | 5         | 0        |
| 5        |             | TOTAL CUSTOMER-BASED RATE BASE             |              | 431,790,508   | 380,847,020  | 35,960,038       | 9,062,229        | 2,925,969 | 2,776,856 | 218,394  |
| 6        |             | EQUITY CAPITAL @ 52.340%                   |              | 225,999,152   | 199,335,330  | 18,821,484       | 4,743,171        | 1,531,452 | 1,453,406 | 114,308  |
| 7        |             | RETURN ON RATE BASE @ 8.100%               |              | 34,975,031    | 30,848,609   | 2,912,763        | 734,041          | 237,004   | 224,925   | 17,690   |
| 8        |             | RETURN ON EQUITY @ 10.950%                 |              | 24,746,907    | 21,827,219   | 2,060,952        | 519,377          | 167,694   | 159,148   | 12,517   |
| 9        | 303.30      | CUSTOMER & OTHER-BASED SOFTWARE [1]        | 11           | 1,238,036     | 980,500      | 108,353          | 70,902           | 46,129    | 31,607    | 545      |
| 10       | 380.00      | SERVICES                                   | 15           | 17,294,953    | 15,711,946   | 1,319,951        | 214,284          | 31,650    | 17,122    | 0        |
| 11       | 380.00      | DIRECT - SERVICES                          | Pg 15        | 49            | 0            | 0                | 0                | 0         | 0         | 49       |
| 12       | 380.12      | CSL REPLACEMENT                            | 15           | 0             | 0            | 0                | 0                | 0         | 0         | 0        |
| 13       | 381.00      | METERS                                     | 16           | 937,707       | 705,840      | 151,027          | 70,581           | 7,924     | 2,213     | 122      |
| 14       | 381.10      | AUTOMATIC METER READING                    | 16           | 1,297,423     | 976,609      | 208,963          | 97,657           | 10,963    | 3,062     | 169      |
| 15       | 382.00      | METER INSTALLATIONS                        | 16           | 825,547       | 621,414      | 132,963          | 62,139           | 6,976     | 1,948     | 107      |
| 16       | 383.00      | HOUSE REGULATORS                           | 21           | 298,012       | 270,124      | 22,804           | 4,476            | 498       | 98        | 12       |
| 17       | 384.00      | HOUSE REG INSTALLATIONS                    | 21           | 37,255        | 33,769       | 2,851            | 560              | 62        | 12        | 1        |
| 18       | 385.00      | IND M&R EQUIPMENT                          | 17           | 437,919       | 0            | 11,789           | 75,186           | 153,403   | 197,541   | 0        |
| 19       | 385.00      | DIRECT - IND M&R EQUIPMENT                 | Pg 15        | 11,470        | 0            | 0                | 0                | 0         | 0         | 11,470   |
| 20       | 385.10      | IND M&R EQUIPMENT - LG VOLUME              | 17           | 0             | 0            | 0                | 0                | 0         | 0         | 0        |
| 21       |             | TOTAL DEPRECIATION EXPENSES                |              | 22,378,371    | 19,300,202   | 1,958,701        | 595,785          | 257,605   | 253,603   | 12,475   |
| 22       |             | TOTAL NET SALVAGE AMORTIZED [1]            | 11           | 1,291,084     | 1,022,513    | 112,996          | 73,940           | 48,106    | 32,961    | 568      |
| 23       |             | TOTAL DEPRECIATION & AMORTIZATION EXPENSES |              | 23,669,455    | 20,322,715   | 2,071,697        | 669,725          | 305,711   | 286,564   | 13,043   |

[1] NET SALVAGE @ 27.211% 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, 2019

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1

PAGE 25 OF 31

WITNESS: M. P. BALMERT

| LINE NO. | ACCT NO.<br>(A) | ACCOUNT TITLE<br>(B)                                 | ALLOC FACTOR<br>(C) | TOTAL COMPANY<br>(D) | RSS/RDS<br>(E) | SGSS1/SCD1/SGDS1<br>(F) | SGSS2/SCD2/SGDS2<br>(G) | SDS/LGSS<br>(H) | LDS/LGSS<br>(I) | MLDS<br>(J) |
|----------|-----------------|------------------------------------------------------|---------------------|----------------------|----------------|-------------------------|-------------------------|-----------------|-----------------|-------------|
|          |                 |                                                      |                     | \$                   | \$             | \$                      | \$                      | \$              | \$              | \$          |
| 1        | 874.00          | MAINS & SERVICES [SERVICES ONLY][1]                  |                     | 4,532,528            | 4,117,652      | 345,921                 | 56,158                  | 8,295           | 4,487           | 15          |
| 2        | 876.00          | M & R - INDUSTRIAL                                   | 17                  | 282,622              | 0              | 7,608                   | 48,523                  | 99,002          | 127,488         | 0           |
| 3        | 878.00          | METERS & HOUSE REGULATORS                            | 23                  | 2,617,608            | 2,027,966      | 389,893                 | 174,437                 | 19,580          | 5,418           | 314         |
| 4        | 879.00          | CUSTOMER INSTALLATIONS                               | 15                  | 6,830,672            | 6,205,461      | 521,317                 | 84,632                  | 12,500          | 6,762           | 0           |
| 5        | 890.00          | M & R - INDUSTRIAL                                   | 17                  | 150,902              | 0              | 4,062                   | 25,908                  | 52,861          | 68,070          | 0           |
| 6        | 892.00          | SERVICES                                             | 15                  | 7,471,330            | 6,787,479      | 570,212                 | 92,570                  | 13,673          | 7,397           | 0           |
| 7        | 893.00          | METERS & HOUSE REGULATORS                            | 23                  | 505,241              | 391,430        | 75,256                  | 33,669                  | 3,779           | 1,046           | 61          |
| 8        |                 | TOTAL DISTRIBUTION                                   |                     | 22,390,903           | 19,529,988     | 1,914,269               | 515,898                 | 209,690         | 220,669         | 390         |
| 9        | 901.00          | SUPERVISION                                          | 6                   | 0                    | 0              | 0                       | 0                       | 0               | 0               | 0           |
| 10       | 902.00          | METER READING                                        | 6                   | 686,852              | 627,089        | 51,294                  | 7,624                   | 680             | 144             | 21          |
| 11       | 903.00          | CUSTOMER RECORDS AND COLLECTION EXPENSES             | 6                   | 7,794,148            | 7,115,979      | 582,067                 | 86,515                  | 7,716           | 1,637           | 234         |
| 12       | 903.00          | INTEREST ON CUSTOMER DEPOSITS                        | 9                   | 108,514              | 79,468         | 27,088                  | 1,958                   | 0               | 0               | 0           |
| 13       | 904.00          | UNCOLLECTIBLES-DIS REVENUE                           | 7                   | 4,410,259            | 4,257,355      | 82,428                  | 70,476                  | 0               | 0               | 0           |
| 14       | 904.00          | UNCOLLECTIBLES-GMB/GTS REVENUE                       | 8                   | 323,417              | (5)            | 3,131                   | 14,897                  | 145,554         | 147,692         | 12,148      |
| 15       | 905.00          | MISCELLANEOUS                                        | 6                   | 3,951                | 3,607          | 295                     | 44                      | 4               | 1               | 0           |
| 16       | 921.00          | OFFICE SUPPLIES & EXPENSES                           | 6                   | 0                    | 0              | 0                       | 0                       | 0               | 0               | 0           |
| 17       |                 | TOTAL CUSTOMER ACCOUNTS                              |                     | 13,327,141           | 12,083,493     | 746,303                 | 181,514                 | 153,954         | 149,474         | 12,403      |
| 18       | 907.00          | SUPERVISION                                          | 6                   | 0                    | 0              | 0                       | 0                       | 0               | 0               | 0           |
| 19       | 908.00          | CUSTOMER ASSISTANCE                                  | 6                   | 20,892               | 19,074         | 1,560                   | 232                     | 21              | 4               | 1           |
| 20       | 909.00          | INFORMATIONAL & INSTRUCTIONAL EXPENSES               | 6                   | 203,522              | 185,814        | 15,199                  | 2,259                   | 201             | 43              | 6           |
| 21       | 910.00          | MISCELLANEOUS                                        | 6                   | 1,024,093            | 934,987        | 76,479                  | 11,367                  | 1,014           | 215             | 31          |
| 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                   | 0                    | 0              | 0                       | 0                       | 0               | 0               | 0           |
| 25       |                 | TOTAL CUST SERVICE & INFORMATION                     |                     | 1,248,507            | 1,139,875      | 93,238                  | 13,858                  | 1,236           | 262             | 38          |
| 26       | 912.00          | DEMONSTRATION                                        | 6                   | 605,075              | 552,428        | 45,187                  | 6,716                   | 599             | 127             | 18          |
| 27       | 913.00          | ADVERTISING                                          | 6                   | 274,671              | 250,772        | 20,512                  | 3,049                   | 272             | 58              | 8           |
| 28       |                 | TOTAL SALES                                          |                     | 879,746              | 803,200        | 65,699                  | 9,765                   | 871             | 185             | 26          |
| 29       |                 | CUSTOMER-RELATED BENEFITS                            | 24                  | 838,779              | 683,713        | 73,368                  | 39,683                  | 24,241          | 17,690          | 84          |
| 30       |                 | CUSTOMER-RELATED PAYROLL TAXES                       | 11                  | 814,781              | 645,289        | 71,310                  | 46,663                  | 30,359          | 20,801          | 359         |
| 31       |                 | TOTAL CUST-RELATED O&M [LINES 8, 17, 25, 28,29 & 30] |                     | 39,499,857           | 34,885,558     | 2,964,187               | 807,381                 | 420,351         | 409,081         | 13,300      |
| 32       |                 | DEPRECIATION EXPENSE                                 | Pg 24               | 23,669,455           | 20,322,715     | 2,071,697               | 669,725                 | 305,711         | 286,564         | 13,043      |
| 33       |                 | INCOME TAXES                                         |                     | 10,055,003           | 8,868,694      | 837,393                 | 211,030                 | 68,136          | 64,664          | 5,086       |
| 34       |                 | RETURN ON RATE BASE                                  | Pg 24               | 34,975,032           | 30,848,609     | 2,912,763               | 734,041                 | 237,004         | 224,925         | 17,690      |
| 35       |                 | TOTAL ANNUAL CUSTOMER-BASED COST                     |                     | 108,199,347          | 94,925,576     | 8,786,040               | 2,422,177               | 1,031,202       | 985,234         | 49,119      |
| 36       |                 | AVERAGE ANNUAL CUSTOMER BILLS [2]                    |                     | 5,283,795            | 4,828,182      | 391,250                 | 57,979                  | 5,168           | 1,082           | 134         |
| 37       |                 | MONTHLY CUSTOMER BASED COST/BILL [LINE 35 / LINE 36] |                     | \$ 20.48             | \$ 19.66       | \$ 22.46                | \$ 41.78                | \$ 199.54       | \$ 910.57       | \$366.56    |

[1] MAINS AND SERVICES @ 24.711% 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, 2019

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1  
PAGE 26 OF 31  
WITNESS: M. P. BALMERT

| LINE NO. | ACCT NO.<br>(A) | ACCOUNT TITLE<br>(B)                                           | ALLOC FACTOR<br>(C) | TOTAL COMPANY<br>(D)<br>\$ | RSS/RDS<br>(E)<br>\$ | SGSS1/SCD1/SGDS1<br>(F)<br>\$ | SGSS2/SCD2/SGDS2<br>(G)<br>\$ | SDS/LGSS<br>(H)<br>\$ | LDS/LGSS<br>(I)<br>\$ | MLDS<br>(J)<br>\$ |
|----------|-----------------|----------------------------------------------------------------|---------------------|----------------------------|----------------------|-------------------------------|-------------------------------|-----------------------|-----------------------|-------------------|
| 1        |                 | TOTAL GROSS PLANT LESS GENERAL & INTANGIBLE PLANT Pg 17        |                     | 2,652,888,586              |                      |                               |                               |                       |                       |                   |
| 2        | 380.00          | SERVICES                                                       | Pg 17               | 592,415,097                |                      |                               |                               |                       |                       |                   |
| 3        | 380.00          | DIRECT - SERVICES                                              | Pg 17               | 1,966                      |                      |                               |                               |                       |                       |                   |
| 4        | 380.12          | CSL REPLACEMENT                                                | Pg 17               | -                          |                      |                               |                               |                       |                       |                   |
| 5        | 381.00          | METERS                                                         | Pg 17               | 40,150,510                 |                      |                               |                               |                       |                       |                   |
| 6        | 381.10          | AUTOMATIC METER READING                                        | Pg 17               | 19,350,242                 |                      |                               |                               |                       |                       |                   |
| 7        | 382.00          | METER INSTALLATIONS                                            | Pg 17               | 43,214,952                 |                      |                               |                               |                       |                       |                   |
| 8        | 383.00          | HOUSE REGULATORS                                               | Pg 17               | 13,305,976                 |                      |                               |                               |                       |                       |                   |
| 9        | 384.00          | HOUSE REG INSTALLATIONS                                        | Pg 17               | 3,864,772                  |                      |                               |                               |                       |                       |                   |
| 10       | 385.00          | IND M&R EQUIPMENT                                              | Pg 17               | 8,110,311                  |                      |                               |                               |                       |                       |                   |
| 11       | 385.00          | DIRECT - IND M&R EQUIPMENT                                     | Pg 17               | 373,618                    |                      |                               |                               |                       |                       |                   |
| 12       | 385.10          | IND M&R EQUIPMENT - LG VOLUME                                  | Pg 17               | 1,085,273                  |                      |                               |                               |                       |                       |                   |
| 13       |                 | CUSTOMER-RELATED GROSS PLANT                                   |                     | 721,872,716                |                      |                               |                               |                       |                       |                   |
| 14       |                 | GENERAL PLANT                                                  | Pg 3                | 31,812,773                 |                      |                               |                               |                       |                       |                   |
| 15       |                 | GENERAL PLANT CUSTOMER-RELATED COSTS PCT [Line 13 / Line 1]    |                     | 27.211%                    |                      |                               |                               |                       |                       |                   |
| 16       |                 | CUSTOMER-RELATED GENERAL PLANT                                 |                     | 8,656,574                  |                      |                               |                               |                       |                       |                   |
| 17       |                 | INTANGIBLE PLANT [ACCOUNT 303.3 ONLY]                          | Pg 3                | 35,849,130                 |                      |                               |                               |                       |                       |                   |
| 18       |                 | INTANGIBLE PLANT CUSTOMER-RELATED COSTS PCT [Line 13 / Line 1] |                     | 27.211%                    |                      |                               |                               |                       |                       |                   |
| 19       |                 | CUSTOMER-RELATED INTANGIBLE PLANT                              |                     | 9,754,907                  |                      |                               |                               |                       |                       |                   |

[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, 2019

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1  
PAGE 27 OF 31  
WITNESS: M. P. BALMERT

| LINE NO. | ACCT NO.<br>(A)                         | ACCOUNT TITLE<br>(B)         | ALLOC FACTOR<br>(C) | TOTAL COMPANY<br>(D)<br>\$ | RSS/RDS<br>(E)<br>\$ | SGSS1/SCD1/SGDS1<br>(F)<br>\$ | SGSS2/SCD2/SGDS2<br>(G)<br>\$ | SDS/LGSS<br>(H)<br>\$ | LDS/LGSS<br>(I)<br>\$ | MLDS<br>(J)<br>\$ |
|----------|-----------------------------------------|------------------------------|---------------------|----------------------------|----------------------|-------------------------------|-------------------------------|-----------------------|-----------------------|-------------------|
| LINE NO. | ACCT. NO.                               | ACCOUNT                      |                     | TOTAL PLANT                |                      |                               |                               |                       |                       |                   |
| 1        | 376.00                                  | MAINS                        | Pg 3                | 1,713,900,920              |                      |                               |                               |                       |                       |                   |
| 2        | 376.00                                  | DIRECT - MAINS - MDS         | Pg 3                | 210,855                    |                      |                               |                               |                       |                       |                   |
| 3        | 376.08                                  | MAINS-CSL REPLACEMENTS       | Pg 3                | 23,760,169                 |                      |                               |                               |                       |                       |                   |
| 4        | 376.30                                  | MAINS-BARE STEEL             | Pg 3                | 66,563,956                 |                      |                               |                               |                       |                       |                   |
| 5        | 376.30                                  | DIRECT - MAINS-BARE STEEL    | Pg 3                | 80,847                     |                      |                               |                               |                       |                       |                   |
| 6        | 376.80                                  | MAINS-CAST IRON              | Pg 3                | 400,795                    |                      |                               |                               |                       |                       |                   |
| 7        |                                         | TOTAL MAINS                  |                     | 1,804,917,543              | 75.289%              |                               |                               |                       |                       |                   |
| 8        | 380.00                                  | SERVICES                     | Pg 3                | 592,415,097                |                      |                               |                               |                       |                       |                   |
| 9        | 380.00                                  | DIRECT - SERVICES            | Pg 3                | 1,966                      |                      |                               |                               |                       |                       |                   |
| 10       | 380.12                                  | CSL REPLACEMENT              |                     | -                          |                      |                               |                               |                       |                       |                   |
| 11       |                                         | TOTAL SERVICES               |                     | 592,417,063                | 24.711%              |                               |                               |                       |                       |                   |
| 12       |                                         | TOTAL MAINS AND SERVICES     |                     | 2,397,334,606              |                      |                               |                               |                       |                       |                   |
| 13       |                                         | TOTAL ACCOUNT 874            | Pg 7                | 18,342,149                 |                      |                               |                               |                       |                       |                   |
|          |                                         | PERCENTAGE SERVICES          |                     | 24.711%                    |                      |                               |                               |                       |                       |                   |
| 14       |                                         | CUSTOMER-RELATED ACCOUNT 874 |                     | 4,532,528                  |                      |                               |                               |                       |                       |                   |
| 15       | Customer Based Mains                    |                              |                     | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 16       | Services                                |                              | Pg 23               | 592,417,063                | 538,191,343          | 45,213,120                    | 7,340,023                     | 1,084,120             | 586,491               | 1,966             |
| 17       | Total Customer Based Mains and Services |                              |                     | 592,417,063                | 538,191,343          | 45,213,120                    | 7,340,023                     | 1,084,120             | 586,491               | 1,966             |
|          |                                         |                              |                     | 100.000%                   | 90.847%              | 7.632%                        | 1.239%                        | 0.183%                | 0.099%                | 0.000%            |
| 18       | Account 874                             |                              | Line 14             | 4,532,528                  |                      |                               |                               |                       |                       |                   |
| 19       | CUSTOMER BASED ACCOUNT 874              |                              |                     | 4,532,528                  | 4,117,652            | 345,921                       | 56,158                        | 8,295                 | 4,487                 | 15                |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
CUSTOMER BASED COSTS - CUSTOMER CHARGE CALCULATION EXCLUDING MAINS - BENEFITS  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1

PAGE 28 OF 31

WITNESS: M. P. BALMERT

| LINE<br>NO. | ACCT<br>NO.<br>(A) | ACCOUNT TITLE<br>(B)                                                     | ADJUSTED<br>LABOR<br>DOLLARS<br>\$ |        | ADJUSTED<br>BENEFIT<br>DOLLARS<br>\$ | ADJUSTED<br>PAYROLL<br>TAXES<br>\$ |
|-------------|--------------------|--------------------------------------------------------------------------|------------------------------------|--------|--------------------------------------|------------------------------------|
| 1           |                    | TOTAL LABOR DOLLARS (Exhibit 104, Schedule 1, Page 2, Lines 1 & 2)       | 35,131,256                         |        |                                      |                                    |
| 2           |                    | TOTAL BENEFIT DOLLARS (Exhibit 104, Schedule 1, Page 2, Lines 3, 4, & 5) |                                    |        | 2,816,591                            |                                    |
| 3           |                    | TOTAL PAYROLL TAXES (Exhibit 111, Page 9, Lines 1, 2, & 5)               |                                    |        |                                      | 2,735,998                          |
| 4           | 874.00             | MAINS & SERVICES (1) Alloc 24                                            | 1,773,062                          | 5.05%  | 142,153                              | 138,086                            |
| 5           | 876.00             | M & R - INDUSTRIAL (2) Alloc 24                                          | 167,559                            | 0.48%  | 13,435                               | 13,051                             |
| 6           | 878.00             | METERS & HOUSE REGULATORS Alloc 24                                       | 1,646,086                          | 4.69%  | 131,985                              | 128,209                            |
| 7           | 879.00             | CUSTOMER INSTALLATIONS Alloc 24                                          | 3,739,777                          | 10.65% | 299,826                              | 291,247                            |
| 8           | 890.00             | M & R - INDUSTRIAL Alloc 24                                              | 49,378                             | 0.14%  | 3,971                                | 3,858                              |
| 9           | 892.00             | SERVICES Alloc 24                                                        | 1,635,187                          | 4.66%  | 131,112                              | 127,361                            |
| 10          | 893.00             | METERS & HOUSE REGULATORS Alloc 24                                       | 223,699                            | 0.64%  | 17,942                               | 17,428                             |
| 11          | 902.00             | METER READING Alloc 24                                                   | 303,223                            | 0.86%  | 24,307                               | 23,612                             |
| 12          | 903.00             | BILLING & ACCOUNTING Alloc 24                                            | 923,726                            | 2.63%  | 74,048                               | 71,929                             |
| 13          | 920.00             | SALARIES Alloc 24                                                        | -                                  | 0.00%  | -                                    | -                                  |
| 14          |                    | TOTAL                                                                    | 10,461,697                         | 29.78% | 838,779                              | 814,781                            |

(1) MAINS AND SERVICES @ 24.711% 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, 2019

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1  
PAGE 29 OF 31  
WITNESS: M. P. BALMERT

| LINE NO. | ACCT NO.<br>(A) | ACCOUNT TITLE<br>(B)                            | ALLOC FACTOR<br>(C) | TOTAL COMPANY<br>(D)<br>\$ | RSS/RDS<br>(E)<br>\$ | SGSS1/SCD1/SGDS1<br>(F)<br>\$ | SGSS2/SCD2/SGDS2<br>(G)<br>\$ | SDS/LGSS<br>(H)<br>\$ | LDS/LGSS<br>(I)<br>\$ | MLDS<br>(J)<br>\$ |
|----------|-----------------|-------------------------------------------------|---------------------|----------------------------|----------------------|-------------------------------|-------------------------------|-----------------------|-----------------------|-------------------|
| 1        |                 | CUSTOMER COMPONENT EXPENSES                     |                     |                            |                      |                               |                               |                       |                       |                   |
| 2        | 874.00          | MAINS & SERVICES                                | Pg 25               | 4,532,528                  | 4,117,652            | 345,921                       | 56,158                        | 8,295                 | 4,487                 | 15                |
| 3        | 876.00          | M & R - INDUSTRIAL                              | Pg 25               | 282,622                    | 0                    | 7,608                         | 48,523                        | 99,002                | 127,488               | 0                 |
| 4        | 878.00          | METERS & HOUSE REGULATORS                       | Pg 25               | 2,617,608                  | 2,027,966            | 389,893                       | 174,437                       | 19,580                | 5,418                 | 314               |
| 5        | 879.00          | CUSTOMER INSTALLATIONS                          | Pg 25               | 6,830,672                  | 6,205,461            | 521,317                       | 84,632                        | 12,500                | 6,762                 | 0                 |
| 6        | 890.00          | M & R - INDUSTRIAL                              | Pg 25               | 150,902                    | 0                    | 4,062                         | 25,908                        | 52,861                | 68,070                | 0                 |
| 7        | 892.00          | SERVICES                                        | Pg 25               | 7,471,330                  | 6,787,479            | 570,212                       | 92,570                        | 13,673                | 7,397                 | 0                 |
| 8        | 893.00          | METERS & HOUSE REGULATORS                       | Pg 25               | <u>505,241</u>             | <u>391,430</u>       | <u>75,256</u>                 | <u>33,669</u>                 | <u>3,779</u>          | <u>1,046</u>          | <u>61</u>         |
| 9        |                 | TOTAL                                           |                     | 22,390,903                 | 19,529,988           | 1,914,269                     | 515,898                       | 209,690               | 220,669               | 390               |
| 10       |                 | TOTAL COMPANY EXPENSES                          |                     |                            |                      |                               |                               |                       |                       |                   |
| 11       | 874.00          | MAINS & SERVICES                                | Pg 21               | 18,342,149                 | 14,628,231           | 1,553,947                     | 1,023,859                     | 679,760               | 454,152               | 2,201             |
| 12       | 876.00          | M & R - INDUSTRIAL                              | Pg 21               | 282,622                    | (0)                  | 7,608                         | 48,523                        | 99,003                | 127,488               | 0                 |
| 13       | 878.00          | METERS & HOUSE REGULATORS                       | Pg 21               | 2,617,608                  | 2,027,966            | 389,893                       | 174,437                       | 19,580                | 5,418                 | 314               |
| 14       | 879.00          | CUSTOMER INSTALLATIONS                          | Pg 21               | 6,830,672                  | 6,205,461            | 521,317                       | 84,632                        | 12,500                | 6,762                 | 0                 |
| 15       | 890.00          | M & R - INDUSTRIAL                              | Pg 21               | 150,902                    | 0                    | 4,062                         | 25,908                        | 52,861                | 68,070                | 0                 |
| 16       | 892.00          | SERVICES                                        | Pg 21               | 7,471,330                  | 6,787,479            | 570,212                       | 92,570                        | 13,673                | 7,397                 | 0                 |
| 17       | 893.00          | METERS & HOUSE REGULATORS                       | Pg 21               | <u>505,241</u>             | <u>391,431</u>       | <u>75,256</u>                 | <u>33,669</u>                 | <u>3,779</u>          | <u>1,046</u>          | <u>61</u>         |
| 18       |                 | TOTAL                                           |                     | 36,200,524                 | 30,040,567           | 3,122,295                     | 1,483,599                     | 881,155               | 670,333               | 2,576             |
| 19       |                 | PERCENTAGE CUSTOMER RELATED (LINE 10 / LINE 19) |                     | 61.852%                    | 65.012%              | 61.310%                       | 34.773%                       | 23.797%               | 32.919%               | 15.131%           |
| 20       |                 | TOTAL COMPANY EXPENSES (PAGE 7)                 |                     |                            |                      |                               |                               |                       |                       |                   |
| 21       | 870.00          | SUPERVISION & ENGINEERING                       | Pg 21               | 8,084,222                  | 6,556,062            | 700,013                       | 395,884                       | 250,611               | 180,844               | 808               |
| 22       |                 | PERCENTAGE CUSTOMER RELATED                     |                     |                            | <u>65.012%</u>       | <u>61.310%</u>                | <u>34.773%</u>                | <u>23.797%</u>        | <u>32.919%</u>        | <u>15.131%</u>    |
| 23       | 870.00          | SUPERVISION & ENGINEERING CUSTOMER RELATED      |                     | 4,948,358                  | 4,262,227            | 429,178                       | 137,661                       | 59,638                | 59,532                | 122               |
| 24       | 880.00          | OTHER                                           | Pg 21               | 3,800,938                  | 3,082,447            | 329,123                       | 186,132                       | 117,829               | 85,027                | 380               |
| 25       |                 | PERCENTAGE CUSTOMER RELATED                     |                     |                            | <u>65.012%</u>       | <u>61.310%</u>                | <u>34.773%</u>                | <u>23.797%</u>        | <u>32.919%</u>        | <u>15.131%</u>    |
| 26       | 880.00          | OTHER CUSTOMER RELATED                          |                     | 2,326,557                  | 2,003,960            | 201,785                       | 64,724                        | 28,040                | 27,990                | 58                |
| 27       | 885.00          | SUPERVISION & ENGINEERING                       | Pg 21               | 138,648                    | 112,439              | 12,006                        | 6,790                         | 4,298                 | 3,102                 | 14                |
| 28       |                 | PERCENTAGE CUSTOMER RELATED                     |                     |                            | <u>65.012%</u>       | <u>61.310%</u>                | <u>34.773%</u>                | <u>23.797%</u>        | <u>32.919%</u>        | <u>15.131%</u>    |
| 29       | 885.00          | SUPERVISION & ENGINEERING CUSTOMER RELATED      |                     | 84,867                     | 73,099               | 7,361                         | 2,361                         | 1,023                 | 1,021                 | 2                 |
| 30       | 894.00          | OTHER EQUIPMENT                                 | Pg 21               | 963,782                    | 781,598              | 83,454                        | 47,196                        | 29,877                | 21,560                | 96                |
| 31       |                 | PERCENTAGE CUSTOMER RELATED                     |                     |                            | <u>65.012%</u>       | <u>61.310%</u>                | <u>34.773%</u>                | <u>23.797%</u>        | <u>32.919%</u>        | <u>15.131%</u>    |
| 32       | 894.00          | OTHER EQUIPMENT CUSTOMER RELATED                |                     | 589,933                    | 508,133              | 51,166                        | 16,412                        | 7,110                 | 7,097                 | 15                |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
CUSTOMER BASED COSTS - SYSTEM CHARGE CALCULATION EXCLUDING MAINS - OTHER RATE BASE ITEMS  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

| ALLOCATED COST OF SERVICE<br>CUSTOMER/DEMAND |                    |                                                                 |                        |                               |                      |                               |                               |                       |                       | 111, SCHEDULE 1<br>PAGE 30 OF 31<br>WITNESS: M. P. BALMERT |
|----------------------------------------------|--------------------|-----------------------------------------------------------------|------------------------|-------------------------------|----------------------|-------------------------------|-------------------------------|-----------------------|-----------------------|------------------------------------------------------------|
| LINE<br>NO.                                  | ACCT<br>NO.<br>(A) | ACCOUNT TITLE<br>(B)                                            | ALLOC<br>FACTOR<br>(C) | TOTAL<br>COMPANY<br>(D)<br>\$ | RSS/RDS<br>(E)<br>\$ | SGSS1/SCD1/SGDS1<br>(F)<br>\$ | SGSS2/SCD2/SGDS2<br>(G)<br>\$ | SDS/LGSS<br>(H)<br>\$ | LDS/LGSS<br>(I)<br>\$ | MLDS<br>(J)<br>\$                                          |
| 1                                            |                    | Total Gross Plant                                               | Pg 12                  | 2,737,191,110                 | 2,167,432,993        | 239,832,976                   | 157,044,088                   | 101,876,259           | 69,741,803            | 1,262,992                                                  |
| 2                                            |                    | Customer Based Gross Plant Without Mains                        | Pg 23                  | 731,627,623                   | 638,798,134          | 64,171,711                    | 17,466,793                    | 5,565,424             | 5,231,645             | 393,917                                                    |
| 3                                            |                    | Percent                                                         |                        | 100.000%                      | 87.312%              | 8.771%                        | 2.387%                        | 0.761%                | 0.715%                | 0.054%                                                     |
| 4                                            |                    | Customer Based Gross Plant to Total Gross Plant                 |                        | 26.729%                       |                      |                               |                               |                       |                       |                                                            |
| 5                                            |                    | Total Deferred Income Taxes                                     | Pg 10                  | (381,731,924)                 |                      |                               |                               |                       |                       |                                                            |
| 6                                            |                    | <b>CUSTOMER BASED DEFERRED INCOME TAXES</b>                     |                        | <b>(102,033,658)</b>          | <b>(89,087,547)</b>  | <b>(8,949,463)</b>            | <b>(2,435,940)</b>            | <b>(776,161)</b>      | <b>(729,611)</b>      | <b>(54,936)</b>                                            |
| 7                                            |                    | DIST. PLANT EXCL ACCTS 375.70, 375.71, & 387                    | Pg 22                  | 2,632,013,410                 | 2,084,467,771        | 230,362,553                   | 150,724,980                   | 98,080,576            | 67,207,147            | 1,170,384                                                  |
| 8                                            |                    | Customer Based Dist Plant Excl 375.7, 375.71.387                | Pg 23                  | 721,872,717                   | 631,072,443          | 63,317,962                    | 16,908,129                    | 5,201,956             | 4,982,602             | 389,625                                                    |
| 9                                            |                    | Percent                                                         |                        | 100.000%                      | 87.422%              | 8.771%                        | 2.342%                        | 0.721%                | 0.690%                | 0.054%                                                     |
| 10                                           |                    | Customer Based Gross Plant to Dist Plant Excl 375.7, 375.71.387 |                        | 27.427%                       |                      |                               |                               |                       |                       |                                                            |
| 11                                           |                    | Materials & Supplies                                            | Pg 10                  | 851,388                       |                      |                               |                               |                       |                       |                                                            |
| 12                                           |                    | <b>CUSTOMER BASED MATERIALS &amp; SUPPLIES</b>                  |                        | <b>233,507</b>                | <b>204,135</b>       | <b>20,482</b>                 | <b>5,469</b>                  | <b>1,683</b>          | <b>1,612</b>          | <b>126</b>                                                 |
| 13                                           |                    | DIST. PLANT EXCL ACCTS 375.70, 375.71, & 387                    | Pg 22                  | 2,632,013,410                 | 2,084,467,771        | 230,362,553                   | 150,724,980                   | 98,080,576            | 67,207,147            | 1,170,384                                                  |
| 14                                           |                    | Customer Based Gross Plant Without Mains                        | Pg 23                  | 721,872,717                   | 631,072,443          | 63,317,962                    | 16,908,129                    | 5,201,956             | 4,982,602             | 389,625                                                    |
| 15                                           |                    | Percent                                                         |                        | 100.000%                      | 87.422%              | 8.771%                        | 2.342%                        | 0.721%                | 0.690%                | 0.054%                                                     |
| 16                                           |                    | Customer Based Gross Plant to Dist Plant Excl 375.7, 375.71.387 |                        | 27.427%                       |                      |                               |                               |                       |                       |                                                            |
| 17                                           |                    | Customer Advances                                               | Pg 10                  | 2,552                         |                      |                               |                               |                       |                       |                                                            |
| 18                                           |                    | <b>CUSTOMER BASED ADVANCES</b>                                  |                        | <b>700</b>                    | <b>612</b>           | <b>61</b>                     | <b>16</b>                     | <b>5</b>              | <b>5</b>              | <b>0</b>                                                   |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
C&I NETWORK CUSTOMER BASED COSTS  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1  
PAGE 31 OF 31  
WITNESS: M. P. BALMERT

| LINE NO. | ACCT NO. | ACCOUNT TITLE<br>(A)                                      | ALLOC FACTOR<br>(B) | TOTAL COMPANY<br>(C)<br>\$ | RSS/RDS<br>(D)<br>\$ | SGSS1/SCD1/SGDS1<br>(E)<br>\$ | SGSS2/SCD2/SGDS2<br>(F)<br>\$ | SDS/LGSS<br>(G)<br>\$ | LDS/LGSS<br>(I)<br>\$ | MLDS<br>(J)<br>\$ |
|----------|----------|-----------------------------------------------------------|---------------------|----------------------------|----------------------|-------------------------------|-------------------------------|-----------------------|-----------------------|-------------------|
| 1        | 303.30   | INTANGIBLE PLANT - C&I NETWORK ONLY                       | 26                  | 1,612,791                  | 0                    | 0                             | 328,848                       | 1,039,734             | 217,614               | 26,595            |
| 2        | 381.10   | AUTOMATIC METER READING - C&I NET ONLY                    | 26                  | <u>4,600,627</u>           | <u>0</u>             | <u>0</u>                      | <u>938,068</u>                | <u>2,965,932</u>      | <u>620,763</u>        | <u>75,864</u>     |
| 3        |          | TOTAL GROSS PLANT                                         |                     | 6,213,418                  | 0                    | 0                             | 1,266,916                     | 4,005,666             | 838,376               | 102,459           |
| 4        | 303.30   | INTANGIBLE PLANT - C&I NETWORK ONLY                       | 26                  | 107,519                    | 0                    | 0                             | 21,923                        | 69,315                | 14,508                | 1,773             |
| 5        | 381.10   | AUTOMATIC METER READING - C&I NET ONLY                    | 26                  | <u>102,236</u>             | <u>0</u>             | <u>0</u>                      | <u>20,846</u>                 | <u>65,910</u>         | <u>13,795</u>         | <u>1,686</u>      |
| 6        |          | TOTAL DEPRECIATION RESERVE                                |                     | 209,755                    | 0                    | 0                             | 42,769                        | 135,225               | 28,302                | 3,459             |
| 7        | 282      | ACCUMULATED DEF INCOME TAX - C&I NET ONLY                 | 26                  | (263,690)                  | 0                    | 0                             | (53,766)                      | (169,996)             | (35,580)              | (4,348)           |
| 8        |          | TOTAL C&I NETWORK RATE BASE                               |                     | 6,159,483                  | 0                    | 0                             | 1,255,919                     | 3,970,896             | 831,099               | 101,570           |
| 9        |          | EQUITY CAPITAL @ 52.340%                                  |                     | 3,223,873                  | 0                    | 0                             | 657,348                       | 2,078,367             | 434,997               | 53,162            |
| 10       |          | RETURN ON RATE BASE @ 8.100%                              |                     | 498,918                    | 0                    | 0                             | <u>101,729</u>                | <u>321,643</u>        | <u>67,319</u>         | <u>8,227</u>      |
| 11       |          | RETURN ON EQUITY @ 10.950%                                |                     | 353,014                    | 0                    | 0                             | 71,980                        | 227,581               | 47,632                | 5,821             |
| 12       | 303.30   | INTANGIBLE PLANT - C&I NETWORK ONLY                       | 26                  | 322,558                    | 0                    | 0                             | 65,770                        | 207,947               | 43,523                | 5,319             |
| 13       | 381.10   | AUTOMATIC METER READING - C&I NET ONLY                    | 26                  | <u>306,708</u>             | <u>0</u>             | <u>0</u>                      | <u>62,538</u>                 | <u>197,729</u>        | <u>41,384</u>         | <u>5,058</u>      |
| 14       |          | TOTAL DEPRECIATION EXPENSE                                |                     | 629,266                    | 0                    | 0                             | 128,308                       | 405,675               | 84,907                | 10,377            |
| 15       | 920      | SALARIES - C&I NETWORK ONLY                               | 26                  | 102,933                    | 0                    | 0                             | 20,988                        | 66,359                | 13,889                | 1,697             |
| 16       | 923      | OUTSIDE SERVICES EMPLOYED - C&I NETWORK ON                | 26                  | <u>1,183,511</u>           | <u>0</u>             | <u>0</u>                      | <u>241,318</u>                | <u>762,986</u>        | <u>159,691</u>        | <u>19,516</u>     |
| 17       |          | TOTAL OPERATING EXPENSES                                  |                     | 1,286,444                  | 0                    | 0                             | 262,306                       | 829,345               | 173,580               | 21,213            |
| 18       |          | TOTAL OPERATING EXPENSE (LINE 17)                         |                     | 1,286,444                  | 0                    | 0                             | 262,306                       | 829,345               | 173,580               | 21,213            |
| 19       |          | TOTAL DEPRECIATION EXPENSE (LINE 14)                      |                     | 629,266                    | 0                    | 0                             | 128,308                       | 405,675               | 84,907                | 10,377            |
| 20       |          | INCOME TAXES (LINE 11 / (1-.2889) * .2889)                |                     | 143,434                    | 0                    | 0                             | 29,246                        | 92,469                | 19,354                | 2,365             |
| 21       |          | RETURN ON RATE BASE (LINE 10)                             |                     | <u>498,918</u>             | <u>0</u>             | <u>0</u>                      | <u>101,729</u>                | <u>321,643</u>        | <u>67,319</u>         | <u>8,227</u>      |
| 22       |          | TOTAL C&I NETWORK COST                                    |                     | 2,558,062                  | 0                    | 0                             | 521,589                       | 1,649,132             | 345,160               | 42,182            |
| 23       |          | C&I CUSTOMERS (PAGE 13, LINE 51)                          |                     | 667                        | 0                    | 0                             | 136                           | 430                   | 90                    | 11                |
| 24       | Less:    | C&I FLEX CUSTOMERS Not Subject to rate increase           |                     | <u>13</u>                  | <u>0</u>             | <u>0</u>                      | <u>0</u>                      | <u>0</u>              | <u>12</u>             | <u>1</u>          |
| 25       |          | NET C&I CUSTOMERS                                         |                     | 654                        | 0                    | 0                             | 136                           | 430                   | 78                    | 10                |
| 26       |          | MONTHLY COST PER CUSTOMER (LINE 22 / LINE 25 / 12 MONTHS) |                     | 325.95                     | 0.00                 | 0.00                          | 319.60                        | 319.60                | 368.76                | 351.52            |

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

DOCKET NO.: R-2018-2647577

WITNESS: M. P. BALMERT

STUDY TYPE: PEAK & AVERAGE

FORECASTED TEST YEAR: DECEMBER 31, 2019

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, 2019

ALLOCATED COST OF SERVICE  
PEAK & AVERAGE

111, SCHEDULE 2  
PAGE 1 OF 13  
WITNESS: M. P. BALMERT

| LINE<br>NO. | ACCOUNT TITLE<br>(A)                           | ALLOC<br>FACTOR<br>(B) | TOTAL<br>COMPANY<br>(C)<br>\$ | RSS/RDS<br>(D)<br>\$ | SGSS1/SCD1/SGDS1<br>(E)<br>\$ | SGSS2/SCD2/SGDS2<br>(F)<br>\$ | SDS/LGSS<br>(G)<br>\$ | LDS/LGSS<br>(H)<br>\$ | MLDS<br>(I)<br>\$ |
|-------------|------------------------------------------------|------------------------|-------------------------------|----------------------|-------------------------------|-------------------------------|-----------------------|-----------------------|-------------------|
| 1           | TOTAL REVENUE [PAGE 6]                         |                        | 622,285,201                   | 462,878,129          | 58,830,258                    | 55,532,281                    | 23,458,935            | 20,067,870            | 1,517,729         |
| 2           | PRODUCTS PURCHASED [PAGE 7]                    |                        | 163,506,936                   | 120,184,061          | 21,240,416                    | 18,646,735                    | 3,167,707             | 0                     | 268,017           |
| 3           | OPERATING & MAINTENANCE EXPENSES [PAGES 7 & 8] |                        | 191,576,058                   | 147,935,118          | 13,807,451                    | 10,827,104                    | 7,429,363             | 11,526,299            | 50,724            |
| 4           | DEPRECIATION & AMORTIZATION [PAGE 5]           |                        | 77,301,907                    | 50,818,852           | 7,015,735                     | 6,871,125                     | 4,625,251             | 7,927,626             | 43,319            |
| 5           | TAXES OTHER THAN INCOME [PAGE 9]               |                        | 3,456,803                     | 2,450,685            | 311,165                       | 254,410                       | 160,135               | 279,910               | 497               |
| 6           | TOTAL EXPENSES & TAXES OTHER THAN INCOME       |                        | 435,841,705                   | 321,388,717          | 42,374,767                    | 36,599,374                    | 15,382,456            | 19,733,835            | 362,556           |
| 7           | OPERATING INCOME BEFORE TAXES                  |                        | 186,443,497                   | 141,489,411          | 16,455,491                    | 18,932,906                    | 8,076,480             | 334,036               | 1,155,173         |
| 8           | INCOME TAXES                                   |                        | 31,547,473                    | 26,305,475           | 2,773,732                     | 3,429,927                     | 966,162               | (2,250,637)           | 322,814           |
| 9           | INVESTMENT TAX CREDIT                          | 12                     | (299,568)                     | (193,928)            | (27,360)                      | (27,701)                      | (18,043)              | (32,398)              | (138)             |
| 10          | NET INCOME TAXES                               |                        | 31,247,905                    | 26,111,547           | 2,746,373                     | 3,402,226                     | 948,119               | (2,283,035)           | 322,676           |
| 11          | OPERATING INCOME                               |                        | 155,195,592                   | 115,377,865          | 13,709,118                    | 15,530,680                    | 7,128,361             | 2,617,071             | 832,497           |
| 12          | RATE BASE [PAGE 10]                            |                        | 1,915,996,457                 | 1,225,209,544        | 175,172,624                   | 183,609,587                   | 120,227,140           | 210,892,957           | 884,604           |
| 13          | RATE OF RETURN EARNED ON RATE BASE             |                        | 8.100%                        | 9.417%               | 7.826%                        | 8.459%                        | 5.929%                | 1.241%                | 94.110%           |
| 14          | UNITIZED RETURN                                |                        | 1.00                          | 1.16                 | 0.97                          | 1.04                          | 0.73                  | 0.15                  | 11.62             |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
RATE OF RETURN BY CLASS - CURRENT @ CURRENT RATES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

ALLOCATED COST OF SERVICE  
PEAK & AVERAGE

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

| LINE NO. | ACCOUNT TITLE<br>(A)                           | ALLOC FACTOR<br>(B) | TOTAL COMPANY<br>(C)<br>\$ | RSS/RDS<br>(D)<br>\$ | SGSS1/SCD1/SGDS1<br>(E)<br>\$ | SGSS2/SCD2/SGDS2<br>(F)<br>\$ | SDS/LGSS<br>(G)<br>\$ | LDS/LGSS<br>(H)<br>\$ | MLDS<br>(I)<br>\$ |
|----------|------------------------------------------------|---------------------|----------------------------|----------------------|-------------------------------|-------------------------------|-----------------------|-----------------------|-------------------|
| 1        | TOTAL REVENUE [PAGE 6]                         |                     | 575,348,119                | 425,172,823          | 56,439,543                    | 53,366,240                    | 20,955,034            | 17,939,195            | 1,475,286         |
| 2        | PRODUCTS PURCHASED [PAGE 7]                    |                     | 163,506,936                | 120,184,061          | 21,240,416                    | 18,646,735                    | 3,167,707             | 0                     | 268,017           |
| 3        | OPERATING & MAINTENANCE EXPENSES [PAGES 7 & 8] |                     | 191,017,256                | 147,486,223          | 13,778,988                    | 10,801,316                    | 7,399,553             | 11,500,957            | 50,219            |
| 4        | DEPRECIATION & AMORTIZATION [PAGE 5]           |                     | 77,301,907                 | 50,818,852           | 7,015,735                     | 6,871,125                     | 4,625,251             | 7,927,626             | 43,319            |
| 5        | TAXES OTHER THAN INCOME [PAGE 9]               |                     | 3,456,803                  | 2,450,685            | 311,165                       | 254,410                       | 160,135               | 279,910               | 497               |
| 6        | TOTAL EXPENSES & TAXES OTHER THAN INCOME       |                     | 435,282,902                | 320,939,822          | 42,346,304                    | 36,573,587                    | 15,352,646            | 19,708,492            | 362,051           |
| 7        | OPERATING INCOME BEFORE TAXES                  |                     | 140,065,217                | 104,233,001          | 14,093,238                    | 16,792,653                    | 5,602,388             | (1,769,297)           | 1,113,235         |
| 8        | INCOME TAXES [PAGE 11]                         |                     | 19,611,902                 | 16,717,441           | 2,165,800                     | 2,879,127                     | 329,448               | (2,791,935)           | 312,021           |
| 9        | INVESTMENT TAX CREDIT                          | 12                  | (299,568)                  | (193,928)            | (27,360)                      | (27,701)                      | (18,043)              | (32,398)              | (138)             |
| 10       | NET INCOME TAXES                               |                     | 19,312,334                 | 16,523,512           | 2,138,441                     | 2,851,426                     | 311,405               | (2,824,333)           | 311,883           |
| 11       | OPERATING INCOME                               |                     | 120,752,883                | 87,709,488           | 11,954,797                    | 13,941,227                    | 5,290,983             | 1,055,036             | 801,351           |
| 12       | RATE BASE [PAGE 10]                            |                     | 1,915,996,457              | 1,225,209,544        | 175,172,624                   | 183,609,587                   | 120,227,140           | 210,892,957           | 884,604           |
| 13       | RATE OF RETURN EARNED ON RATE BASE             |                     | 6.302%                     | 7.159%               | 6.825%                        | 7.593%                        | 4.401%                | 0.500%                | 90.589%           |
| 14       | UNITIZED RETURN                                |                     | 1.00                       | 1.14                 | 1.08                          | 1.20                          | 0.70                  | 0.08                  | 14.37             |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
GROSS PLANT (Accounts 101 & 106)  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

ALLOCATED COST OF SERVICE  
PEAK & AVERAGE

111, SCHEDULE 2

PAGE 3 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)<br>\$     | (E)<br>\$     | (F)<br>\$        | (G)<br>\$        | (H)<br>\$   | (I)<br>\$   | (J)<br>\$ |
| 1                         | 301-305   | INTANGIBLE PLANT                           | 11           | 42,397,572    | 27,438,861    | 3,868,354        | 3,918,808        | 2,557,846   | 4,595,049   | 18,655    |
| 2                         | 301-305   | INTANGIBLE PLANT - C&I NETWORK ONLY        | 26           | 1,612,791     | 0             | 0                | 328,848          | 1,039,734   | 217,614     | 26,595    |
| 3                         | 350-362   | UNDERGROUND STORAGE PLANT                  | 25           | 5,856,461     | 4,336,300     | 781,311          | 633,259          | 96,456      | 0           | 9,136     |
| <b>DISTRIBUTION PLANT</b> |           |                                            |              |               |               |                  |                  |             |             |           |
| 4                         | 374.10    | LAND - CITY GATE & M/L IND M&R             | 5            | 21,944        | 12,324        | 2,032            | 2,602            | 1,765       | 3,221       | 0         |
| 5                         | 374.20    | LAND - OTHER DISTRIBUTION                  | 5            | 477,102       | 267,950       | 44,189           | 56,565           | 38,369      | 70,029      | 0         |
| 6                         | 374.30    | LAND RIGHTS - CITY GATE MAIN LINE          | 5            | 95,361        | 53,557        | 8,832            | 11,306           | 7,669       | 13,997      | 0         |
| 7                         | 374.40    | LAND RIGHTS - OTHER DISTRIBUTION           | 5            | 3,032,712     | 1,703,232     | 280,890          | 359,558          | 243,891     | 445,142     | 0         |
| 8                         | 374.40    | DIRECT - LAND RIGHTS-OTHER DISTRIBUTION    |              | 0             | 0             | 0                | 0                | 0           | 0           | 0         |
| 9                         | 374.41    | LAND RIGHTS - OTHER DISTRIBUTION LOC       | 5            | 13            | 10            | 1                | 0                | 0           | 2           | 0         |
| 10                        | 374.50    | RIGHTS OF WAY                              | 5            | 3,233,092     | 1,815,769     | 299,449          | 383,315          | 260,005     | 474,553     | 0         |
| 11                        | 374.50    | DIRECT - RIGHTS OF WAY                     |              | 51            | 0             | 0                | 0                | 0           | 0           | 51        |
| 12                        | 375.20    | M & R STRUCTURES - CITY GATE               | 5            | 7,026         | 3,946         | 651              | 833              | 565         | 1,031       | 0         |
| 13                        | 375.31    | M & R STRUCTURES - LOCAL GAS PURCH         | 5            | 4,012         | 2,254         | 372              | 476              | 323         | 589         | 0         |
| 14                        | 375.40    | M & R STRUCTURES - REGULATING              | 5            | 4,752,758     | 2,669,244     | 440,200          | 563,487          | 382,217     | 697,610     | 0         |
| 15                        | 375.40    | DIRECT - M & R STRUCTURES - REGULATING     | 5            | 30,949        | 0             | 0                | 0                | 0           | 0           | 30,949    |
| 16                        | 375.60    | M & R STRUCTURES - DIST. IND. M & R        | 17           | 87,670        | 0             | 2,360            | 15,052           | 30,711      | 39,547      | 0         |
| 17                        | 375.70    | M & R STRUCTURES - OTHER                   | 11           | 9,600,426     | 6,213,204     | 875,943          | 887,367          | 579,194     | 1,040,494   | 4,224     |
| 18                        | 375.71    | M & R STRUCTURES - OTHER LEASED            | 11           | 5,092,381     | 3,295,687     | 464,629          | 470,689          | 307,223     | 551,912     | 2,241     |
| 19                        | 375.80    | M & R STRUCTURES - COMMUNICATION           | 5            | 16,515        | 9,275         | 1,530            | 1,958            | 1,328       | 2,424       | 0         |
| 20                        | 376.00    | MAINS                                      | 5            | 1,713,900,920 | 962,561,035   | 158,741,503      | 203,200,093      | 137,831,912 | 251,566,377 | 0         |
| 21                        | 376.00    | DIRECT - MAINS - MDS                       |              | 210,855       | 0             | 0                | 0                | 0           | 0           | 210,855   |
| 22                        | 376.08    | MAINS-CSL REPLACEMENTS                     | 5            | 23,760,169    | 13,344,186    | 2,200,667        | 2,817,006        | 1,910,793   | 3,487,518   | 0         |
| 23                        | 376.30    | MAINS-BARE STEEL                           | 5            | 66,563,956    | 37,383,649    | 6,165,154        | 7,891,823        | 5,353,073   | 9,770,258   | 0         |
| 24                        | 376.30    | DIRECT - MAINS-BARE STEEL                  |              | 80,847        | 0             | 0                | 0                | 0           | 0           | 80,847    |
| 25                        | 376.80    | MAINS-CAST IRON                            | 5            | 400,795       | 225,095       | 37,122           | 47,518           | 32,232      | 58,829      | 0         |
| 26                        | 378.10    | M & R EQUIP - GENERAL                      | 5            | 1,371,450     | 770,234       | 127,024          | 162,599          | 110,292     | 201,301     | 0         |
| 27                        | 378.20    | M & R EQUIP - GENERAL - REGULATING         | 5            | 91,022,247    | 51,119,915    | 8,430,481        | 10,791,598       | 7,320,009   | 13,360,246  | 0         |
| 28                        | 378.20    | DIRECT - M & R EQUIP-GEN-REG               |              | 458,058       | 0             | 0                | 0                | 0           | 0           | 458,058   |
| 29                        | 378.30    | M & R EQUIP - LOCAL GAS PURCHASES          | 5            | 471,962       | 265,063       | 43,713           | 55,956           | 37,955      | 69,275      | 0         |
| 30                        | 379.10    | M & R EQUIP - CITY GATE                    | 5            | 140,677       | 79,007        | 13,030           | 16,679           | 11,313      | 20,649      | 0         |
| 31                        | 379.11    | M & R EQUIP - EXCHANGE GAS                 | 5            | (450)         | (253)         | (42)             | (53)             | (36)        | (66)        | 0         |
| 32                        | 380.00    | SERVICES                                   | 15           | 592,415,097   | 538,191,343   | 45,213,120       | 7,340,023        | 1,084,120   | 586,491     | 0         |
| 33                        | 380.00    | DIRECT - SERVICES                          |              | 1,966         | 0             | 0                | 0                | 0           | 0           | 1,966     |
| 34                        | 380.12    | CSL REPLACEMENT                            | 15           | 0             | 0             | 0                | 0                | 0           | 0           | 0         |
| 35                        | 381.00    | METERS                                     | 16           | 40,150,510    | 30,222,493    | 6,466,641        | 3,022,129        | 339,272     | 94,755      | 5,220     |
| 36                        | 381.10    | AUTOMATIC METER READING                    | 16           | 19,350,242    | 14,565,508    | 3,116,550        | 1,456,493        | 163,510     | 45,667      | 2,516     |
| 37                        | 381.10    | AUTOMATIC METER READING - C&I NET ONLY     | 26           | 4,600,627     | 0             | 0                | 938,068          | 2,965,932   | 620,763     | 75,864    |
| 38                        | 382.00    | METER INSTALLATIONS                        | 16           | 43,214,952    | 32,529,191    | 6,960,200        | 3,252,789        | 365,166     | 101,987     | 5,618     |
| 39                        | 383.00    | HOUSE REGULATORS                           | 21           | 13,305,976    | 12,060,802    | 1,018,173        | 199,856          | 22,221      | 4,391       | 532       |
| 40                        | 384.00    | HOUSE REG INSTALLATIONS                    | 21           | 3,864,772     | 3,503,107     | 295,732          | 58,049           | 6,454       | 1,275       | 155       |
| 41                        | 385.00    | IND M&R EQUIPMENT                          | 17           | 8,110,311     | 0             | 218,330          | 1,392,459        | 2,841,042   | 3,658,480   | 0         |
| 42                        | 385.00    | DIRECT - IND M&R EQUIPMENT                 |              | 373,618       | 0             | 0                | 0                | 0           | 0           | 373,618   |
| 43                        | 385.10    | IND M&R EQUIPMENT - LG VOLUME              | 17           | 1,085,273     | 0             | 29,216           | 186,331          | 380,171     | 489,556     | 0         |
| 44                        | 387.10    | OTHER EQUIP DISTRIBUTION                   | 11           | 19,450        | 12,588        | 1,775            | 1,798            | 1,173       | 2,108       | 9         |
| 45                        | 387.20    | OTHER EQUIP ODORIZATION                    | 11           | 117,248       | 75,880        | 10,698           | 10,837           | 7,074       | 12,707      | 52        |
| 46                        | 387.42    | OTHER EQUIP RADIO                          | 11           | 119,609       | 77,409        | 10,913           | 11,056           | 7,216       | 12,963      | 53        |
| 47                        | 387.44    | OTHER EQUIP COMMUNICATION                  | 11           | 627,109       | 405,853       | 57,218           | 57,964           | 37,834      | 67,966      | 276       |
| 48                        | 387.46    | OTHER EQUIP CUSTOMER INFO SERVICE          | 11           | 7,441,517     | 4,816,001     | 678,964          | 687,819          | 448,947     | 806,512     | 3,274     |
| 49                        | 387.45    | DIRECT - OTHER EQUIP CUSTOMER INFO SERVICE |              | 39,788        | 0             | 0                | 0                | 0           | 0           | 39,788    |
| 50                        | 387.50    | GPS EQUIPMENT                              | 11           | 2,053,366     | 1,328,897     | 187,349          | 189,793          | 123,880     | 222,544     | 904       |
| 51                        |           | TOTAL DISTRIBUTION PLANT                   |              | 2,661,724,931 | 1,719,583,453 | 242,444,607      | 246,541,889      | 163,254,813 | 288,603,102 | 1,297,067 |
| 52                        | 389-398   | GENERAL PLANT                              | 11           | 31,812,773    | 20,588,590    | 2,902,597        | 2,940,455        | 1,919,265   | 3,447,868   | 13,998    |
| 53                        |           | TOTAL GROSS PLANT                          |              | 2,741,791,737 | 1,771,947,204 | 249,996,869      | 254,034,410      | 167,828,379 | 296,646,019 | 1,338,856 |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
DEPRECIATION RESERVE  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

| ALLOCATED COST OF SERVICE<br>PEAK & AVERAGE |                     |                                            |                        |                               |                      |                               |                               |                       |                       |                   | 111, SCHEDULE 2<br>PAGE 4 OF 13<br>WITNESS: M. P. BALMERT |
|---------------------------------------------|---------------------|--------------------------------------------|------------------------|-------------------------------|----------------------|-------------------------------|-------------------------------|-----------------------|-----------------------|-------------------|-----------------------------------------------------------|
| LINE<br>NO.                                 | ACCT.<br>NO.<br>(A) | ACCOUNT TITLE<br>(B)                       | ALLOC<br>FACTOR<br>(C) | TOTAL<br>COMPANY<br>(D)<br>\$ | RSS/RDS<br>(E)<br>\$ | SGSS1/SCD1/SGDS1<br>(F)<br>\$ | SGSS2/SCD2/SGDS2<br>(G)<br>\$ | SDS/LGSS<br>(H)<br>\$ | LDS/LGSS<br>(I)<br>\$ | MLDS<br>(J)<br>\$ |                                                           |
| 1                                           | 301-305             | INTANGIBLE PLANT                           | 11                     | 15,661,171                    | 10,135,597           | 1,428,925                     | 1,447,562                     | 944,838               | 1,697,358             | 6,891             |                                                           |
| 2                                           | 301-305             | INTANGIBLE PLANT - C&I NETWORK ONLY        | 26                     | 107,519                       | 0                    | 0                             | 21,923                        | 69,315                | 14,508                | 1,773             |                                                           |
| 3                                           | 350-362             | UNDERGROUND STORAGE PLANT                  | 25                     | 4,221,137                     | 3,125,457            | 563,142                       | 456,432                       | 69,522                | 0                     | 6,585             |                                                           |
| DISTRIBUTION PLANT                          |                     |                                            |                        |                               |                      |                               |                               |                       |                       |                   |                                                           |
| 4                                           | 374.10              | LAND - CITY GATE & M/L IND M&R             | 5                      | 0                             | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |                                                           |
| 5                                           | 374.20              | LAND - OTHER DISTRIBUTION                  | 5                      | 134,737                       | 75,671               | 12,479                        | 15,974                        | 10,836                | 19,777                | 0                 |                                                           |
| 6                                           | 374.30              | LAND RIGHTS - CITY GATE MAIN LINE          | 5                      | 0                             | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |                                                           |
| 7                                           | 374.40              | LAND RIGHTS - OTHER DISTRIBUTION           | 5                      | 718,506                       | 403,527              | 66,548                        | 85,186                        | 57,782                | 105,462               | 0                 |                                                           |
| 8                                           | 374.40              | DIRECT - LAND RIGHTS-OTHER DISTRIBUTION    | 5                      | 0                             | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |                                                           |
| 9                                           | 374.41              | LAND RIGHTS - OTHER DISTRIBUTION LOC       | 5                      | 0                             | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |                                                           |
| 10                                          | 374.50              | RIGHTS OF WAY                              | 5                      | 1,723,916                     | 968,186              | 159,669                       | 204,388                       | 138,637               | 253,036               | 0                 |                                                           |
| 11                                          | 374.50              | DIRECT - RIGHTS OF WAY                     | 5                      | 32                            | 0                    | 0                             | 0                             | 0                     | 0                     | 32                |                                                           |
| 12                                          | 375.20              | M & R STRUCTURES - CITY GATE               | 5                      | 0                             | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |                                                           |
| 13                                          | 375.31              | M & R STRUCTURES - LOCAL GAS PURCH         | 5                      | 0                             | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |                                                           |
| 14                                          | 375.40              | M & R STRUCTURES - REGULATING              | 5                      | 1,344,493                     | 755,094              | 124,527                       | 159,403                       | 108,124               | 197,345               | 0                 |                                                           |
| 15                                          | 375.40              | DIRECT - M & R STRUCTURES - REGULATING     | 5                      | 4,888                         | 0                    | 0                             | 0                             | 0                     | 0                     | 4,888             |                                                           |
| 16                                          | 375.60              | M & R STRUCTURES - DIST. IND. M & R        | 17                     | 75,984                        | 0                    | 2,046                         | 13,046                        | 26,617                | 34,276                | 0                 |                                                           |
| 17                                          | 375.70              | M & R STRUCTURES - OTHER                   | 11                     | 3,144,496                     | 2,035,055            | 286,904                       | 290,646                       | 189,707               | 340,801               | 1,384             |                                                           |
| 18                                          | 375.71              | M & R STRUCTURES - OTHER LEASED            | 11                     | 1,300,385                     | 841,583              | 118,647                       | 120,195                       | 78,452                | 140,936               | 572               |                                                           |
| 19                                          | 375.80              | M & R STRUCTURES - COMMUNICATION           | 5                      | 7,601                         | 4,269                | 704                           | 901                           | 611                   | 1,116                 | 0                 |                                                           |
| 20                                          | 376.00              | MAINS                                      | 5                      | 202,910,952                   | 113,958,849          | 18,793,612                    | 24,057,122                    | 16,318,099            | 29,783,270            | 0                 |                                                           |
| 21                                          | 376.00              | DIRECT - MAINS - MDS                       | 5                      | 71,722                        | 0                    | 0                             | 0                             | 0                     | 0                     | 71,722            |                                                           |
| 22                                          | 376.08              | MAINS-CSL REPLACEMENTS                     | 5                      | 0                             | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |                                                           |
| 23                                          | 376.30              | MAINS-BARE STEEL                           | 5                      | 45,994,822                    | 25,831,612           | 4,260,040                     | 5,453,146                     | 3,698,904             | 6,751,120             | 0                 |                                                           |
| 24                                          | 376.30              | DIRECT - MAINS-BARE STEEL                  | 5                      | 82,385                        | 0                    | 0                             | 0                             | 0                     | 0                     | 82,385            |                                                           |
| 25                                          | 376.80              | MAINS-CAST IRON                            | 5                      | 237,129                       | 133,176              | 21,963                        | 28,114                        | 19,070                | 34,806                | 0                 |                                                           |
| 26                                          | 378.10              | M & R EQUIP - GENERAL                      | 5                      | 0                             | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |                                                           |
| 27                                          | 378.20              | M & R EQUIP - GENERAL - REGULATING         | 5                      | 13,158,592                    | 7,390,129            | 1,218,749                     | 1,560,083                     | 1,058,214             | 1,931,418             | 0                 |                                                           |
| 28                                          | 378.20              | DIRECT - M & R EQUIP-GEN-REG               | 5                      | 54,530                        | 0                    | 0                             | 0                             | 0                     | 0                     | 54,530            |                                                           |
| 29                                          | 378.30              | M & R EQUIP - LOCAL GAS PURCHASES          | 5                      | 0                             | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |                                                           |
| 30                                          | 379.10              | M & R EQUIP - CITY GATE                    | 5                      | 104,131                       | 58,482               | 9,645                         | 12,346                        | 8,374                 | 15,284                | 0                 |                                                           |
| 31                                          | 379.11              | M & R EQUIP - EXCHANGE GAS                 | 5                      | 0                             | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |                                                           |
| 32                                          | 380.00              | SERVICES                                   | 15                     | 135,665,837                   | 123,248,343          | 10,354,017                    | 1,680,900                     | 248,269               | 134,309               | 0                 |                                                           |
| 33                                          | 380.00              | DIRECT - SERVICES                          | 15                     | 1,920                         | 0                    | 0                             | 0                             | 0                     | 0                     | 1,920             |                                                           |
| 34                                          | 380.12              | CSL REPLACEMENT                            | 15                     | 0                             | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |                                                           |
| 35                                          | 381.00              | METERS                                     | 16                     | 17,411,447                    | 13,106,119           | 2,804,288                     | 1,310,560                     | 147,127               | 41,091                | 2,264             |                                                           |
| 36                                          | 381.10              | AUTOMATIC METER READING                    | 16                     | 13,729,683                    | 10,334,744           | 2,211,303                     | 1,033,433                     | 116,016               | 32,402                | 1,785             |                                                           |
| 37                                          | 381.10              | AUTOMATIC METER READING - C&I NET ONLY     | 26                     | 102,236                       | 0                    | 0                             | 20,846                        | 65,910                | 13,795                | 1,686             |                                                           |
| 38                                          | 382.00              | METER INSTALLATIONS                        | 16                     | 13,549,487                    | 10,199,105           | 2,182,280                     | 1,019,870                     | 114,493               | 31,977                | 1,761             |                                                           |
| 39                                          | 383.00              | HOUSE REGULATORS                           | 21                     | 4,334,095                     | 3,928,510            | 331,645                       | 65,098                        | 7,238                 | 1,430                 | 173               |                                                           |
| 40                                          | 384.00              | HOUSE REG INSTALLATIONS                    | 21                     | 3,112,325                     | 2,821,074            | 238,155                       | 46,747                        | 5,198                 | 1,027                 | 125               |                                                           |
| 41                                          | 385.00              | IND M&R EQUIPMENT                          | 17                     | 3,051,516                     | 0                    | 82,147                        | 523,915                       | 1,068,946             | 1,376,508             | 0                 |                                                           |
| 42                                          | 385.00              | DIRECT - IND M&R EQUIPMENT                 | 17                     | 110,824                       | 0                    | 0                             | 0                             | 0                     | 0                     | 110,824           |                                                           |
| 43                                          | 385.10              | IND M&R EQUIPMENT - LG VOLUME              | 17                     | 0                             | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |                                                           |
| 44                                          | 387.10              | OTHER EQUIP DISTRIBUTION                   | 11                     | 0                             | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |                                                           |
| 45                                          | 387.20              | OTHER EQUIP ODORIZATION                    | 11                     | 0                             | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |                                                           |
| 46                                          | 387.42              | OTHER EQUIP RADIO                          | 11                     | 0                             | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |                                                           |
| 47                                          | 387.44              | OTHER EQUIP COMMUNICATION                  | 11                     | 0                             | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |                                                           |
| 48                                          | 387.46              | OTHER EQUIP CUSTOMER INFO SERVICE          | 11                     | 2,037,372                     | 1,318,547            | 185,890                       | 188,314                       | 122,915               | 220,810               | 896               |                                                           |
| 49                                          | 387.45              | DIRECT - OTHER EQUIP CUSTOMER INFO SERVICE | 11                     | 2,631                         | 0                    | 0                             | 0                             | 0                     | 0                     | 2,631             |                                                           |
| 50                                          | 387.50              | GPS EQUIPMENT                              | 11                     | 1,049,356                     | 679,122              | 95,743                        | 96,992                        | 63,308                | 113,729               | 462               |                                                           |
| 51                                          |                     | TOTAL DISTRIBUTION PLANT                   |                        | 465,228,030                   | 318,091,196          | 43,561,000                    | 37,987,224                    | 23,672,845            | 41,575,724            | 340,040           |                                                           |
| 52                                          | 389-398             | GENERAL PLANT                              | 11                     | 14,119,387                    | 9,137,785            | 1,288,253                     | 1,305,055                     | 851,823               | 1,530,259             | 6,213             |                                                           |
| 53                                          |                     | TOTAL DEPRECIATION RESERVE                 |                        | 499,229,725                   | 340,490,035          | 46,841,320                    | 41,196,272                    | 25,539,028            | 44,803,341            | 359,729           |                                                           |



COLUMBIA GAS OF PENNSYLVANIA, INC.  
DEPRECIATION AND AMORTIZATION EXPENSE  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

| 111, SCHEDULE 2           |               |                                             |                  |                   |             |                      |                      |              |              |          |
|---------------------------|---------------|---------------------------------------------|------------------|-------------------|-------------|----------------------|----------------------|--------------|--------------|----------|
| PAGE 5 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               | 4,872,321         | 3,153,269   | 444,551              | 450,349              | 293,947      | 528,062      | 2,144    |
| 2                         | 301-305       | INTANGIBLE PLANT - C&I NETWORK ONLY         | 26               | 322,558           | (0)         | 0                    | 65,770               | 207,947      | 43,523       | 5,319    |
| 3                         | 350-362       | UNDERGROUND STORAGE PLANT                   | 25               | 284,786           | 210,864     | 37,993               | 30,794               | 4,690        | 0            | 444      |
| DISTRIBUTION PLANT        |               |                                             |                  |                   |             |                      |                      |              |              |          |
| 4                         | 374.10        | LAND - CITY GATE & M/L IND M&R              | 5                | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |
| 5                         | 374.20        | LAND - OTHER DISTRIBUTION                   | 5                | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |
| 6                         | 374.30        | LAND RIGHTS - CITY GATE MAIN LINE           | 5                | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |
| 7                         | 374.40        | LAND RIGHTS - OTHER DISTRIBUTION            | 5                | 52,833            | 29,672      | 4,893                | 6,264                | 4,249        | 7,755        | 0        |
| 8                         | 374.40        | DIRECT - LAND RIGHTS-OTHER DISTRIBUTION     | 5                | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |
| 9                         | 374.41        | LAND RIGHTS - OTHER DISTRIBUTION LOC        | 5                | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |
| 10                        | 374.50        | RIGHTS OF WAY                               | 5                | 35,298            | 19,824      | 3,269                | 4,185                | 2,839        | 5,181        | 0        |
| 11                        | 374.50        | DIRECT - RIGHTS OF WAY                      | 5                | 1                 | 0           | 0                    | 0                    | 0            | 0            | 1        |
| 12                        | 375.20        | M & R STRUCTURES - CITY GATE                | 5                | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |
| 13                        | 375.31        | M & R STRUCTURES - LOCAL GAS PURCH          | 5                | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |
| 14                        | 375.40        | M & R STRUCTURES - REGULATING               | 5                | 124,570           | 69,961      | 11,538               | 14,769               | 10,018       | 18,284       | 0        |
| 15                        | 375.40        | DIRECT - M & R STRUCTURES - REGULATING      | 5                | 438               | 0           | 0                    | 0                    | 0            | 0            | 438      |
| 16                        | 375.60        | M & R STRUCTURES - DIST. IND. M & R         | 17               | 545               | 0           | 15                   | 94                   | 191          | 246          | 0        |
| 17                        | 375.70        | M & R STRUCTURES - OTHER                    | 11               | 313,877           | 203,135     | 28,638               | 29,012               | 18,936       | 34,018       | 138      |
| 18                        | 375.71        | M & R STRUCTURES - OTHER LEASED             | 11               | 224,318           | 145,174     | 20,467               | 20,734               | 13,533       | 24,312       | 99       |
| 19                        | 375.80        | M & R STRUCTURES - COMMUNICATION            | 5                | 365               | 205         | 34                   | 43                   | 29           | 54           | 0        |
| 20                        | 376.00        | MAINS                                       | 5                | 38,572,693        | 21,663,196  | 3,572,603            | 4,573,179            | 3,102,016    | 5,661,700    | 0        |
| 21                        | 376.00        | DIRECT - MAINS - MDS                        | 5                | 3,616             | 0           | 0                    | 0                    | 0            | 0            | 3,616    |
| 22                        | 376.08        | MAINS-CSL REPLACEMENTS                      | 5                | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |
| 23                        | 376.30        | MAINS-BARE STEEL                            | 5                | 401,985           | 225,763     | 37,232               | 47,659               | 32,328       | 59,003       | 0        |
| 24                        | 376.30        | DIRECT - MAINS-BARE STEEL                   | 5                | 2,622             | 0           | 0                    | 0                    | 0            | 0            | 2,622    |
| 25                        | 376.80        | MAINS-CAST IRON                             | 5                | 6,932             | 3,893       | 642                  | 822                  | 558          | 1,018        | 0        |
| 26                        | 378.10        | M & R EQUIP - GENERAL                       | 5                | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |
| 27                        | 378.20        | M & R EQUIP - GENERAL - REGULATING          | 5                | 3,603,117         | 2,023,583   | 333,721              | 427,186              | 289,763      | 528,866      | 0        |
| 28                        | 378.20        | DIRECT - M & R EQUIP-GEN-REG                | 5                | 12,093            | 0           | 0                    | 0                    | 0            | 0            | 12,093   |
| 29                        | 378.30        | M & R EQUIP - LOCAL GAS PURCHASES           | 5                | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |
| 30                        | 379.10        | M & R EQUIP - CITY GATE                     | 5                | 3,534             | 1,985       | 327                  | 419                  | 284          | 519          | 0        |
| 31                        | 379.11        | M & R EQUIP - EXCHANGE GAS                  | 5                | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |
| 32                        | 380.00        | SERVICES                                    | 15               | 17,294,953        | 15,711,946  | 1,319,951            | 214,285              | 31,650       | 17,122       | 0        |
| 33                        | 380.00        | DIRECT - SERVICES                           | 15               | 49                | 0           | 0                    | 0                    | 0            | 0            | 49       |
| 34                        | 380.12        | CSL REPLACEMENT                             | 15               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |
| 35                        | 381.00        | METERS                                      | 16               | 937,707           | 705,840     | 151,027              | 70,581               | 7,924        | 2,213        | 122      |
| 36                        | 381.10        | AUTOMATIC METER READING                     | 16               | 1,297,423         | 976,609     | 208,963              | 97,657               | 10,963       | 3,062        | 169      |
| 37                        | 381.10        | AUTOMATIC METER READING - C&I NET ONLY      | 26               | 306,708           | 0           | 0                    | 62,538               | 197,729      | 41,384       | 5,058    |
| 38                        | 382.00        | METER INSTALLATIONS                         | 16               | 825,547           | 621,414     | 132,963              | 62,139               | 6,976        | 1,948        | 107      |
| 39                        | 383.00        | HOUSE REGULATORS                            | 21               | 298,012           | 270,124     | 22,804               | 4,476                | 498          | 98           | 12       |
| 40                        | 384.00        | HOUSE REG INSTALLATIONS                     | 21               | 37,255            | 33,769      | 2,851                | 560                  | 62           | 12           | 2        |
| 41                        | 385.00        | IND M&R EQUIPMENT                           | 17               | 437,919           | 0           | 11,789               | 75,186               | 153,403      | 197,541      | 0        |
| 42                        | 385.00        | DIRECT - IND M&R EQUIPMENT                  | 17               | 11,470            | 0           | 0                    | 0                    | 0            | 0            | 11,470   |
| 43                        | 385.10        | IND M&R EQUIPMENT - LG VOLUME               | 17               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |
| 44                        | 387.10        | OTHER EQUIP DISTRIBUTION                    | 11               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |
| 45                        | 387.20        | OTHER EQUIP ODORIZATION                     | 11               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |
| 46                        | 387.42        | OTHER EQUIP RADIO                           | 11               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |
| 47                        | 387.44        | OTHER EQUIP COMMUNICATION                   | 11               | 0                 | 0           | 0                    | 0                    | 0            | 0            | 0        |
| 48                        | 387.46        | OTHER EQUIP CUSTOMER INFO SERVICE           | 11               | 394,500           | 255,313     | 35,994               | 36,464               | 23,800       | 42,756       | 174      |
| 49                        | 387.45        | DIRECT - OTHER EQUIP CUSTOMER INFO SERVICE  | 11               | 1,508             | 0           | 0                    | 0                    | 0            | 0            | 1,508    |
| 50                        | 387.50        | GPS EQUIPMENT                               | 11               | 241,930           | 156,572     | 22,074               | 22,362               | 14,596       | 26,220       | 106      |
| 51                        |               | TOTAL DISTRIBUTION PLANT                    |                  | 65,443,818        | 43,117,978  | 5,921,793            | 5,770,611            | 3,922,343    | 6,673,311    | 37,782   |
| 53                        | 389-398       | GENERAL PLANT                               | 11               | 1,956,270         | 1,266,059   | 178,490              | 180,818              | 118,022      | 212,021      | 861      |
| 54                        |               | NET DEPRECIATION & AMORTIZATION EXPENSE     |                  | 72,557,195        | 47,748,169  | 6,582,827            | 6,432,572            | 4,339,002    | 7,413,394    | 41,231   |
| 55                        |               | AMORTIZATION OF NET NEGATIVE SALVAGE        | 11               | 4,744,713         | 3,070,683   | 432,908              | 438,554              | 286,249      | 514,232      | 2,088    |
| 56                        |               | TOTAL AMORTIZATION AND DEPRECIATION EXPENSE |                  | 77,301,908        | 50,818,852  | 7,015,735            | 6,871,126            | 4,625,251    | 7,927,626    | 43,319   |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
OPERATING REVENUE @ PROPOSED & CURRENT RATES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

ALLOCATED COST OF SERVICE  
PEAK & AVERAGE

111, SCHEDULE 2  
PAGE 6 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>PROPOSED OPERATING REVENUE</u> |          |                                  |              |               |             |                  |                  |            |            |           |
| SALES REVENUE                     |          |                                  |              |               |             |                  |                  |            |            |           |
| 1                                 | 480/481  | SALES BASE REVENUE               |              | 291,753,020   | 245,109,543 | 27,539,222       | 16,933,808       | 2,149,847  | 0          | 20,600    |
| 2                                 |          | C&I CHARGE REVENUE               |              | 2,558,065     | 0           | 0                | 521,588          | 1,849,136  | 345,159    | 42,182    |
| 3                                 |          | USP REVENUE                      |              | 25,010,607    | 25,010,607  | 0                | 0                | 0          | 0          | 0         |
| 4                                 |          | STAS REVENUE                     |              | 0             | 0           | 0                | 0                | 0          | 0          | 0         |
| 5                                 |          | RIDER CC - CUSTOMER CHOICE       |              | 33,856        | 24,988      | 4,813            | 4,055            | 0          | 0          | 0         |
| 6                                 |          | GAS PROCUREMENT REVENUE          |              | 2,581,692     | 1,912,126   | 334,502          | 281,823          | 53,241     | 0          | 0         |
| 7                                 |          | MERCHANT FUNCTION REVENUE        |              | 1,216,174     | 1,139,022   | 41,873           | 35,279           | 0          | 0          | 0         |
| 8                                 |          | GAS COST REVENUE                 |              | 153,873,118   | 113,767,356 | 19,902,150       | 16,767,888       | 3,167,707  | 0          | 268,017   |
| 9                                 |          | TOTAL SALES REVENUE              |              | 477,026,532   | 386,963,642 | 47,822,560       | 34,544,441       | 7,019,931  | 345,159    | 330,799   |
| TRANSPORTATION REVENUE            |          |                                  |              |               |             |                  |                  |            |            |           |
| 10                                | 489.00   | TRANSPORTATION BASE REVENUE      |              | 121,907,878   | 61,251,663  | 9,506,980        | 18,930,761       | 16,225,331 | 15,658,687 | 334,456   |
| 11                                |          | USP REVENUE                      |              | 6,931,233     | 6,931,233   | 0                | 0                | 0          | 0          | 0         |
| 12                                |          | STAS REVENUE                     |              | 0             | 0           | 0                | 0                | 0          | 0          | 0         |
| 13                                |          | RIDER CC - CUSTOMER CHOICE       |              | 13,321        | 6,925       | 1,643            | 4,753            | 0          | 0          | 0         |
| 14                                |          | FLEX REVENUE                     |              | 5,079,975     | 0           | 2,678            | 43,793           | 163,647    | 4,020,861  | 848,996   |
| 15                                |          | GAS COST REVENUE                 |              | 9,633,818     | 6,416,705   | 1,338,266        | 1,878,847        | 0          | 0          | 0         |
| 16                                |          | TOTAL TRANSPORTATION REVENUE     |              | 143,566,225   | 74,806,526  | 10,849,567       | 20,856,154       | 16,388,978 | 19,679,548 | 1,183,452 |
| MISCELLANEOUS REVENUE             |          |                                  |              |               |             |                  |                  |            |            |           |
| 17                                | 487.00   | FORFEITED DISCOUNTS              | 10           | 1,347,840     | 995,892     | 132,237          | 125,080          | 49,115     | 42,053     | 3,464     |
| 18                                | 488.00   | MISCELLANEOUS REVENUE            | 6            | 105,936       | 96,719      | 7,911            | 1,176            | 105        | 22         | 3         |
| 19                                | 493.00   | RENTS                            | 11           | 9,600         | 6,213       | 876              | 887              | 579        | 1,040      | 4         |
| 20                                | 495.00   | OTHER                            | 6            | 229,068       | 209,137     | 17,107           | 2,543            | 227        | 48         | 7         |
| 21                                |          | TOTAL MISCELLANEOUS REVENUE      |              | 1,892,444     | 1,307,961   | 158,131          | 129,886          | 50,028     | 43,163     | 3,478     |
| 22                                |          | TOTAL PROPOSED OPERATING REVENUE |              | 622,285,201   | 462,878,129 | 58,830,258       | 55,532,281       | 23,458,935 | 20,067,870 | 1,517,729 |
| <u>CURRENT OPERATING REVENUE</u>  |          |                                  |              |               |             |                  |                  |            |            |           |
| SALES REVENUE                     |          |                                  |              |               |             |                  |                  |            |            |           |
| 23                                | 480/481  | SALES BASE REVENUE               |              | 243,138,783   | 199,086,099 | 25,773,774       | 16,206,338       | 2,051,972  | 0          | 20,600    |
| 24                                |          | USP REVENUE                      |              | 22,946,588    | 22,946,588  | 0                | 0                | 0          | 0          | 0         |
| 25                                |          | STAS REVENUE                     |              | 0             | 0           | 0                | 0                | 0          | 0          | 0         |
| 26                                |          | RIDER CC - CUSTOMER CHOICE       |              | 33,856        | 24,988      | 4,813            | 4,055            | 0          | 0          | 0         |
| 27                                |          | GAS PROCUREMENT REVENUE          |              | 2,581,692     | 1,912,126   | 334,502          | 281,823          | 53,241     | 0          | 0         |
| 28                                |          | MERCHANT FUNCTION REVENUE        |              | 1,216,174     | 1,139,022   | 41,873           | 35,279           | 0          | 0          | 0         |
| 29                                |          | GAS COST REVENUE                 |              | 153,873,118   | 113,767,356 | 19,902,150       | 16,767,888       | 3,167,707  | 0          | 268,017   |
| 30                                |          | TOTAL SALES REVENUE              |              | 423,790,211   | 338,876,179 | 46,057,112       | 33,295,383       | 5,272,920  | 0          | 288,617   |
| TRANSPORTATION REVENUE            |          |                                  |              |               |             |                  |                  |            |            |           |
| 31                                | 489.00   | TRANSPORTATION BASE REVENUE      |              | 126,372,847   | 72,280,984  | 8,890,928        | 18,020,338       | 15,403,016 | 13,678,445 | 99,136    |
| 32                                |          | USP REVENUE                      |              | 6,359,228     | 6,359,228   | 0                | 0                | 0          | 0          | 0         |
| 33                                |          | STAS REVENUE                     |              | 0             | 0           | 0                | 0                | 0          | 0          | 0         |
| 34                                |          | RIDER CC - CUSTOMER CHOICE       |              | 13,321        | 6,925       | 1,643            | 4,753            | 0          | 0          | 0         |
| 35                                |          | FLEX REVENUE                     |              | 5,587,970     | 0           | 3,443            | 46,673           | 232,778    | 4,220,760  | 1,084,316 |
| 36                                |          | GAS COST REVENUE                 |              | 9,633,818     | 6,416,705   | 1,338,266        | 1,878,847        | 0          | 0          | 0         |
| 37                                |          | TOTAL TRANSPORTATION REVENUE     |              | 149,967,184   | 85,063,842  | 10,234,280       | 19,950,811       | 15,635,794 | 17,899,205 | 1,183,452 |
| MISCELLANEOUS REVENUE             |          |                                  |              |               |             |                  |                  |            |            |           |
| 38                                | 487.00   | FORFEITED DISCOUNTS              | 10           | 1,246,120     | 920,733     | 122,257          | 115,640          | 45,409     | 38,879     | 3,203     |
| 39                                | 488.00   | MISCELLANEOUS REVENUE            | 6            | 105,936       | 96,719      | 7,911            | 1,176            | 105        | 22         | 3         |
| 40                                | 493.00   | RENTS                            | 11           | 9,600         | 6,213       | 876              | 887              | 579        | 1,040      | 4         |
| 41                                | 495.00   | OTHER                            | 6            | 229,068       | 209,137     | 17,107           | 2,543            | 227        | 48         | 7         |
| 42                                |          | TOTAL MISCELLANEOUS REVENUE      |              | 1,590,724     | 1,232,802   | 148,151          | 120,246          | 46,320     | 39,990     | 3,217     |
| 43                                |          | TOTAL CURRENT OPERATING REVENUE  |              | 575,348,119   | 425,172,823 | 56,439,543       | 53,366,240       | 20,955,034 | 17,939,195 | 1,475,286 |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
PRODUCTION & DISTRIBUTION O&M EXPENSES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

ALLOCATED COST OF SERVICE  
PEAK & AVERAGE

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

| LINE NO.                                        | ACCT NO.<br>(A) | ACCOUNT TITLE<br>(B)                   | ALLOC FACTOR<br>(C) | TOTAL COMPANY<br>(D)<br>\$ | RSS/RDS<br>(E)<br>\$ | SGSS1/SCD1/SGDS1<br>(F)<br>\$ | SGSS2/SCD2/SGDS2<br>(G)<br>\$ | SDS/LGSS<br>(H)<br>\$ | LDS/LGSS<br>(I)<br>\$ | MLDS<br>(J)<br>\$ |
|-------------------------------------------------|-----------------|----------------------------------------|---------------------|----------------------------|----------------------|-------------------------------|-------------------------------|-----------------------|-----------------------|-------------------|
| <u>PURCHASED GAS EXPENSES</u>                   |                 |                                        |                     |                            |                      |                               |                               |                       |                       |                   |
| 1                                               |                 | GAS PURCHASED COST                     |                     | 163,506,936                | 120,184,061          | 21,240,416                    | 18,646,735                    | 3,167,707             | 0                     | 268,017           |
| 2                                               | 807.00          | PURCHASED GAS EXPENSE                  | 4                   | (1,551,614)                | (1,140,498)          | (201,570)                     | (176,946)                     | (30,055)              | 0                     | (2,545)           |
| 3                                               | 807.00          | GAS PROCUREMENT EXPENSE                | 4                   | <u>2,581,692</u>           | <u>1,897,647</u>     | <u>335,388</u>                | <u>294,416</u>                | <u>50,007</u>         | <u>0</u>              | <u>4,234</u>      |
| 4                                               |                 | TOTAL PURCHASED GAS                    |                     | <u>164,537,014</u>         | <u>120,941,210</u>   | <u>21,374,233</u>             | <u>18,764,205</u>             | <u>3,187,660</u>      | <u>0</u>              | <u>269,706</u>    |
| <u>UNDERGROUND STORAGE OPERATIONS EXPENSES</u>  |                 |                                        |                     |                            |                      |                               |                               |                       |                       |                   |
| 5                                               | 816.00          | WELLS                                  | 25                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 6                                               | 817.00          | LINES                                  | 25                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 7                                               | 818.00          | COMPRESSOR STATION                     | 25                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 8                                               | 820.00          | M & R                                  | 25                  | 124,072                    | 91,867               | 16,552                        | 13,416                        | 2,044                 | 0                     | 194               |
| 9                                               | 821.00          | PURIFICATION                           | 25                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 10                                              | 823.00          | GAS LOSSES                             | 25                  | 1,322                      | 979                  | 176                           | 143                           | 22                    | 0                     | 2                 |
| 11                                              | 825.00          | STORAGE WELL ROYALTIES                 | 25                  | <u>5,199</u>               | <u>3,850</u>         | <u>694</u>                    | <u>562</u>                    | <u>86</u>             | <u>0</u>              | <u>8</u>          |
| 12                                              |                 | TOTAL UNDERGROUND STORAGE OPERATIONS   |                     | <u>130,593</u>             | <u>96,695</u>        | <u>17,422</u>                 | <u>14,121</u>                 | <u>2,151</u>          | <u>0</u>              | <u>204</u>        |
| <u>UNDERGROUND STORAGE MAINTENANCE EXPENSES</u> |                 |                                        |                     |                            |                      |                               |                               |                       |                       |                   |
| 13                                              | 832.00          | WELLS                                  | 25                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 14                                              | 834.00          | COMPRESSOR STATION                     | 25                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 15                                              | 836.00          | PURIFICATION                           | 25                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 16                                              | 840.00          | OTHER STORAGE - OPERATION SUPERV - ENG | 25                  | <u>0</u>                   | <u>0</u>             | <u>0</u>                      | <u>0</u>                      | <u>0</u>              | <u>0</u>              | <u>0</u>          |
| 16                                              |                 | TOTAL UNDERGROUND STORAGE MAINTENANCE  |                     | <u>0</u>                   | <u>0</u>             | <u>0</u>                      | <u>0</u>                      | <u>0</u>              | <u>0</u>              | <u>0</u>          |
| 17                                              |                 | TOTAL UNDERGROUND STORAGE              |                     | <u>130,593</u>             | <u>96,695</u>        | <u>17,422</u>                 | <u>14,121</u>                 | <u>2,151</u>          | <u>0</u>              | <u>204</u>        |
| <u>DISTRIBUTION OPERATIONS EXPENSES</u>         |                 |                                        |                     |                            |                      |                               |                               |                       |                       |                   |
| 18                                              | 870.00          | SUPERVISION & ENGINEERING              | 18                  | 8,084,222                  | 5,666,716            | 722,810                       | 611,814                       | 392,327               | 689,746               | 808               |
| 19                                              | 871.00          | LOAD DISPATCHING                       | 13                  | 160,895                    | 90,346               | 14,901                        | 19,073                        | 12,938                | 23,613                | 26                |
| 20                                              | 874.00          | MAINS & SERVICES                       | 14                  | 18,342,149                 | 11,872,139           | 1,624,748                     | 1,693,164                     | 1,118,688             | 2,031,210             | 2,201             |
| 21                                              | 875.00          | M & R - GENERAL                        | 13                  | 535,041                    | 300,436              | 49,550                        | 63,424                        | 43,023                | 78,523                | 86                |
| 22                                              | 876.00          | M & R - INDUSTRIAL                     | 17                  | 282,622                    | (0)                  | 7,608                         | 48,523                        | 99,003                | 127,488               | 0                 |
| 23                                              | 878.00          | METERS & HOUSE REGULATORS              | 23                  | 2,617,608                  | 2,027,966            | 389,893                       | 174,437                       | 19,580                | 5,418                 | 314               |
| 24                                              | 879.00          | CUSTOMER INSTALLATIONS                 | 15                  | 6,830,672                  | 6,205,461            | 521,317                       | 84,632                        | 12,500                | 6,762                 | 0                 |
| 25                                              | 880.00          | OTHER                                  | 18                  | 3,800,938                  | 2,664,306            | 339,842                       | 287,655                       | 184,460               | 324,296               | 380               |
| 26                                              | 881.00          | RENTS                                  | 18                  | <u>(27,695)</u>            | <u>(19,413)</u>      | <u>(2,476)</u>                | <u>(2,096)</u>                | <u>(1,344)</u>        | <u>(2,363)</u>        | <u>(3)</u>        |
| 27                                              |                 | TOTAL DISTRIBUTION OPERATIONS          |                     | <u>40,626,452</u>          | <u>28,807,956</u>    | <u>3,668,192</u>              | <u>2,980,626</u>              | <u>1,881,173</u>      | <u>3,284,693</u>      | <u>3,812</u>      |
| <u>DISTRIBUTION MAINTENANCE EXPENSES</u>        |                 |                                        |                     |                            |                      |                               |                               |                       |                       |                   |
| 28                                              | 885.00          | SUPERVISION & ENGINEERING              | 18                  | 138,648                    | 97,187               | 12,397                        | 10,493                        | 6,729                 | 11,829                | 14                |
| 29                                              | 886.00          | STRUCTURES AND IMPROVEMENTS            | 13                  | 166,985                    | 93,765               | 15,465                        | 19,794                        | 13,427                | 24,507                | 27                |
| 30                                              | 887.00          | MAINS                                  | 13                  | 11,917,466                 | 6,691,896            | 1,103,677                     | 1,412,696                     | 958,283               | 1,749,007             | 1,907             |
| 31                                              | 889.00          | M & R - GENERAL                        | 13                  | 912,321                    | 512,287              | 84,490                        | 108,147                       | 73,360                | 133,892               | 146               |
| 32                                              | 890.00          | M & R - INDUSTRIAL                     | 17                  | 150,902                    | 0                    | 4,062                         | 25,908                        | 52,861                | 68,070                | 0                 |
| 33                                              | 892.00          | SERVICES                               | 15                  | 7,471,330                  | 6,787,479            | 570,212                       | 92,570                        | 13,673                | 7,397                 | 0                 |
| 34                                              | 893.00          | METERS & HOUSE REGULATORS              | 23                  | 505,241                    | 391,431              | 75,256                        | 33,669                        | 3,779                 | 1,046                 | 61                |
| 35                                              | 894.00          | OTHER EQUIPMENT                        | 18                  | <u>963,782</u>             | <u>675,573</u>       | <u>86,172</u>                 | <u>72,939</u>                 | <u>46,772</u>         | <u>82,230</u>         | <u>96</u>         |
| 36                                              |                 | TOTAL DISTRIBUTION MAINTENANCE         |                     | <u>22,226,675</u>          | <u>15,249,617</u>    | <u>1,951,729</u>              | <u>1,776,217</u>              | <u>1,168,884</u>      | <u>2,077,978</u>      | <u>2,250</u>      |
| 37                                              |                 | TOTAL DISTRIBUTION                     |                     | <u>62,853,127</u>          | <u>44,057,573</u>    | <u>5,619,921</u>              | <u>4,756,843</u>              | <u>3,050,057</u>      | <u>5,362,671</u>      | <u>6,063</u>      |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
OTHER O&M EXPENSES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

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)            |
|                                                |          |                                              |              | \$                 | \$                 | \$                | \$                | \$                | \$                | \$             |
| <u>CUSTOMER ACCOUNTS EXPENSES</u>              |          |                                              |              |                    |                    |                   |                   |                   |                   |                |
| 1                                              | 901.00   | SUPERVISION                                  | 6            | 0                  | 0                  | 0                 | 0                 | 0                 | 0                 | 0              |
| 2                                              | 902.00   | METER READING                                | 6            | 686,852            | 627,089            | 51,294            | 7,624             | 680               | 144               | 21             |
| 3                                              | 903.00   | CUSTOMER RECORDS AND COLLECTION EXPENSES     | 6            | 7,794,148          | 7,115,979          | 582,067           | 86,515            | 7,716             | 1,637             | 234            |
| 4                                              | 903.00   | INTEREST ON CUSTOMER DEPOSITS                | 9            | 108,514            | 79,468             | 27,088            | 1,958             | 0                 | 0                 | 0              |
| 5                                              | 904.00   | UNCOLLECTIBLES-DIS REVENUE                   | 7            | 4,410,259          | 4,257,355          | 82,428            | 70,476            | 0                 | 0                 | 0              |
| 6                                              | 904.00   | UNCOLLECTIBLES-GMB/GTS REVENUE               | 8            | 323,417            | (3)                | 3,131             | 14,897            | 145,554           | 147,692           | 12,148         |
| 7                                              | 904.00   | UNCOLLECTIBLES-UNBUNDLED GAS                 | Direct       | 1,216,174          | 1,139,022          | 41,873            | 35,279            | 0                 | 0                 | 0              |
| 8                                              | 904.00   | DIRECT USP UNCOLLECTIBLES                    |              | 29,305,816         | 29,305,816         | 0                 | 0                 | 0                 | 0                 | 0              |
| 9                                              | 905.00   | MISCELLANEOUS                                | 6            | 3,951              | 3,607              | 295               | 44                | 4                 | 1                 | 0              |
| 10                                             | 921.00   | OFFICE SUPPLIES & EXPENSES                   | 6            | 0                  | 0                  | 0                 | 0                 | 0                 | 0                 | 0              |
| 11                                             |          | TOTAL CUSTOMER ACCOUNTS                      |              | <u>43,849,131</u>  | <u>42,528,334</u>  | <u>788,176</u>    | <u>216,792</u>    | <u>153,954</u>    | <u>149,473</u>    | <u>12,402</u>  |
| <u>CUST SERVICE &amp; INFORMATION EXPENSES</u> |          |                                              |              |                    |                    |                   |                   |                   |                   |                |
| 12                                             | 907.00   | SUPERVISION                                  | 6            | 0                  | 0                  | 0                 | 0                 | 0                 | 0                 | 0              |
| 13                                             | 908.00   | CUSTOMER ASSISTANCE                          | 6            | 20,892             | 19,075             | 1,560             | 232               | 21                | 4                 | 0              |
| 14                                             | 909.00   | INFORMATIONAL & INSTRUCTIONAL EXPENSES       | 6            | 203,522            | 185,819            | 15,199            | 2,259             | 202               | 43                | 1              |
| 15                                             | 910.00   | MISCELLANEOUS                                | 6            | 1,024,093          | 935,015            | 76,479            | 11,367            | 1,014             | 215               | 2              |
| 16                                             | 921.00   | OFFICE SUPPLIES & EXPENSES                   | 6            | 0                  | (3)                | 0                 | 0                 | 0                 | 0                 | 3              |
| 17                                             | 931.00   | RENTS - GENERAL                              | 6            | 0                  | 0                  | 0                 | 0                 | 0                 | 0                 | 0              |
| 18                                             | 932.00   | MAINTENANCE                                  | 6            | 0                  | 0                  | 0                 | 0                 | 0                 | 0                 | 0              |
| 19                                             |          | TOTAL CUST SERVICE & INFORMATION             |              | <u>1,248,507</u>   | <u>1,139,906</u>   | <u>93,239</u>     | <u>13,858</u>     | <u>1,236</u>      | <u>262</u>        | <u>6</u>       |
| <u>SALES EXPENSES</u>                          |          |                                              |              |                    |                    |                   |                   |                   |                   |                |
| 20                                             | 912.00   | DEMONSTRATION                                | 6            | 605,075            | 552,427            | 45,187            | 6,716             | 599               | 127               | 18             |
| 21                                             | 913.00   | ADVERTISING                                  | 6            | 274,671            | 250,772            | 20,512            | 3,049             | 272               | 58                | 8              |
| 22                                             |          | TOTAL SALES                                  |              | <u>879,746</u>     | <u>803,199</u>     | <u>65,699</u>     | <u>9,765</u>      | <u>871</u>        | <u>185</u>        | <u>26</u>      |
| <u>ADMINISTRATIVE AND GENERAL EXPENSES</u>     |          |                                              |              |                    |                    |                   |                   |                   |                   |                |
| 23                                             | 920.00   | SALARIES                                     | 19           | 24,103,497         | 17,635,324         | 2,125,687         | 1,615,175         | 994,269           | 1,730,390         | 2,651          |
| 24                                             | 920.00   | SALARIES - C&I NETWORK ONLY                  | 26           | 102,933            | 0                  | 0                 | 20,988            | 66,359            | 13,889            | 1,697          |
| 25                                             | 921.00   | OFFICE SUPPLIES & EXPENSES                   | 19           | (1,524,783)        | (1,115,608)        | (134,471)         | (102,176)         | (62,897)          | (109,464)         | (168)          |
| 26                                             | 922.00   | ADMIN. EXPENSE TRANSFERRED                   | 19           | 0                  | 0                  | 0                 | 0                 | 0                 | 0                 | 0              |
| 25                                             | 923.00   | OUTSIDE SERVICES EMPLOYED                    | 19           | 25,906,451         | 18,954,455         | 2,284,690         | 1,735,991         | 1,068,641         | 1,859,824         | 2,850          |
| 26                                             | 923.00   | OUTSIDE SERVICES EMPLOYED - C&I NETWORK ONLY | 26           | 1,183,511          | 0                  | 0                 | 241,318           | 762,986           | 159,691           | 19,516         |
| 27                                             | 924.00   | PROPERTY INSURANCE                           | 19           | 55,948             | 40,934             | 4,934             | 3,749             | 2,308             | 4,017             | 6              |
| 28                                             | 925.00   | INJURIES AND DAMAGES                         | 19           | 4,073,358          | 2,980,272          | 359,229           | 272,956           | 168,026           | 292,426           | 448            |
| 29                                             | 926.00   | EMPLOYEE PENSIONS & BENEFITS                 | 24           | 15,645,986         | 11,209,254         | 1,408,295         | 1,115,246         | 698,124           | 1,213,503         | 1,565          |
| 30                                             | 928.00   | REGULATORY COMMISSION EXPENSES               | 19           | 2,418,231          | 1,769,299          | 213,264           | 162,046           | 99,752            | 173,605           | 266            |
| 31                                             | 930.00   | MISCELLANEOUS GENERAL                        | 19           | 637,529            | 466,448            | 56,224            | 42,721            | 26,298            | 45,768            | 70             |
| 32                                             | 931.00   | RENTS-GENERAL                                | 19           | 5,954,736          | 4,356,783          | 525,148           | 399,027           | 245,633           | 427,491           | 655            |
| 33                                             | 932.00   | MAINTENANCE                                  | 19           | 2,468,677          | 1,806,208          | 217,713           | 165,426           | 101,833           | 177,226           | 272            |
| 34                                             |          | TOTAL ADMINISTRATIVE & GENERAL               |              | <u>81,026,074</u>  | <u>58,103,368</u>  | <u>7,060,714</u>  | <u>5,672,467</u>  | <u>4,171,332</u>  | <u>5,988,365</u>  | <u>29,829</u>  |
| 35                                             |          | TOTAL O & M EXPENSES                         |              | <u>354,524,192</u> | <u>267,670,284</u> | <u>35,019,404</u> | <u>29,448,051</u> | <u>10,567,260</u> | <u>11,500,957</u> | <u>318,236</u> |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
TAXES OTHER THAN INCOME TAXES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

ALLOCATED COST OF SERVICE  
PEAK & AVERAGE

111, SCHEDULE 2  
PAGE 9 OF 13  
WITNESS: M. P. BALMERT

| LINE<br>NO. | ACCT<br>NO.<br>(A) | ACCOUNT TITLE<br>(B)          | ALLOC<br>FACTOR<br>(C) | TOTAL<br>COMPANY<br>(D) | RSS/RDS<br>(E)   | SGSS1/SCD1/SGDS1<br>(F) | SGSS2/SCD2/SGDS2<br>(G) | SDS/LGSS<br>(H) | LDS/LGSS<br>(I) | MLDS<br>(J) |
|-------------|--------------------|-------------------------------|------------------------|-------------------------|------------------|-------------------------|-------------------------|-----------------|-----------------|-------------|
|             |                    | <u>FEDERAL TAXES</u>          |                        | \$                      | \$               | \$                      | \$                      | \$              | \$              | \$          |
| 1           | 408.00             | FEDERAL/STATE UNEMPLOYMENT    | 24                     | 137,971                 | 98,847           | 12,419                  | 9,835                   | 6,156           | 10,701          | 14          |
| 2           | 408.00             | FICA                          | 24                     | <u>2,598,027</u>        | <u>1,861,304</u> | <u>233,848</u>          | <u>185,187</u>          | <u>115,924</u>  | <u>201,503</u>  | <u>260</u>  |
| 3           |                    | TOTAL FEDERAL TAXES           |                        | <u>2,735,998</u>        | <u>1,960,151</u> | <u>246,267</u>          | <u>195,022</u>          | <u>122,080</u>  | <u>212,204</u>  | <u>274</u>  |
|             |                    | <u>STATE TAXES</u>            |                        |                         |                  |                         |                         |                 |                 |             |
| 4           | 408.00             | PA PROPERTY TAXES             | 11                     | 435,885                 | 282,096          | 39,770                  | 40,289                  | 26,297          | 47,241          | 192         |
| 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                     | 275                     | 178              | 25                      | 25                      | 17              | 30              | 0           |
| 8           | 408.00             | STATE SALES AND USE TAX       | 19                     | 284,465                 | 208,129          | 25,087                  | 19,062                  | 11,734          | 20,422          | 31          |
| 9           | 408.00             | OTHER                         | 19                     | <u>180</u>              | <u>132</u>       | <u>16</u>               | <u>12</u>               | <u>7</u>        | <u>13</u>       | <u>0</u>    |
| 10          |                    | TOTAL STATE TAXES             |                        | <u>720,805</u>          | <u>490,535</u>   | <u>64,898</u>           | <u>59,388</u>           | <u>38,055</u>   | <u>67,706</u>   | <u>223</u>  |
| 11          |                    | TOTAL TAXES OTHER THAN INCOME |                        | <u>3,456,803</u>        | <u>2,450,685</u> | <u>311,165</u>          | <u>254,410</u>          | <u>160,135</u>  | <u>279,910</u>  | <u>497</u>  |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
RATE BASE  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

ALLOCATED COST OF SERVICE  
PEAK & AVERAGE

111, SCHEDULE 2

PAGE 10 OF 13

WITNESS: M. P. BALMERT

| LINE NO.                     | ACCT NO.<br>(A) | ACCOUNT TITLE<br>(B)                      | ALLOC FACTOR<br>(C) | TOTAL COMPANY<br>(D)<br>\$ | RSS/RDS<br>(E)<br>\$ | SGSS1/SCD1/SGDS1<br>(F)<br>\$ | SGSS2/SCD2/SGDS2<br>(G)<br>\$ | SDS/LGSS<br>(H)<br>\$ | LDS/LGSS<br>(I)<br>\$ | MLDS<br>(J)<br>\$ |
|------------------------------|-----------------|-------------------------------------------|---------------------|----------------------------|----------------------|-------------------------------|-------------------------------|-----------------------|-----------------------|-------------------|
| 1                            | 101-107         | GROSS PLANT [PAGE 3]                      |                     | 2,741,791,737              | 1,771,947,204        | 249,996,869                   | 254,034,410                   | 167,828,379           | 296,646,019           | 1,338,856         |
| 2                            | 117.00          | GAS STORED UNDERGROUND - NON CURRENT      | 25                  | 3,794,693                  | 2,809,704            | 506,250                       | 410,320                       | 62,499                | 0                     | 5,920             |
| 3                            | 108-111         | DEPRECIATION RESERVE [PAGE 4]             |                     | (499,229,725)              | (340,490,035)        | (46,841,320)                  | (41,196,272)                  | (25,539,028)          | (44,803,341)          | (359,729)         |
| 4                            | 117.00          | GAS LOST-UNDERGROUND STORAGE              | 25                  | (163,467)                  | (121,036)            | (21,808)                      | (17,676)                      | (2,692)               | 0                     | (255)             |
| 5                            |                 | NET PLANT                                 |                     | 2,246,193,238              | 1,434,145,838        | 203,639,991                   | 213,230,782                   | 142,349,157           | 251,842,678           | 984,792           |
| <u>WORKING CAPITAL</u>       |                 |                                           |                     |                            |                      |                               |                               |                       |                       |                   |
| 6                            | 154.00          | MATERIALS & SUPPLIES                      | 11                  | 851,388                    | 551,001              | 77,681                        | 78,694                        | 51,364                | 92,273                | 375               |
| 7                            | 164.00          | GAS STORED UNDERGROUND - FSS              | 25                  | 50,432,424                 | 37,341,679           | 6,728,190                     | 5,453,258                     | 830,622               | 0                     | 78,675            |
| 8                            | 165.00          | PREPAYMENTS                               | 19                  | 2,338,584                  | 1,711,024            | 206,240                       | 156,709                       | 96,467                | 167,887               | 257               |
| 9                            | 165.00          | CLOUD BASED ASSETS                        | 11                  | 748,422                    | 484,364              | 68,286                        | 69,177                        | 45,152                | 81,114                | 329               |
| 10                           |                 | CASH WORKING CAPITAL - GAS PURCHASES      | 4                   | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 11                           |                 | CASH WORKING CAPITAL - ALL OTHER          | 19                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 12                           |                 | TOTAL WORKING CAPITAL                     |                     | 54,370,818                 | 40,088,068           | 7,080,397                     | 5,757,838                     | 1,023,605             | 341,274               | 79,636            |
| <u>DEFERRED INCOME TAXES</u> |                 |                                           |                     |                            |                      |                               |                               |                       |                       |                   |
| 13                           | 190.00          | ACCUMULATED DEF INCOME TAX                | 12                  | 79,055,237                 | 51,177,198           | 7,220,115                     | 7,310,238                     | 4,761,497             | 8,549,824             | 36,365            |
| 14                           | 282.00          | ACCUMULATED DEF INCOME TAX                | 12                  | (460,523,471)              | (298,124,474)        | (42,059,609)                  | (42,584,605)                  | (27,737,329)          | (49,805,613)          | (211,841)         |
| 15                           | 282.00          | ACCUMULATED DEF INCOME TAX - C&I NET ONLY | 26                  | (263,690)                  | 0                    | 0                             | (53,766)                      | (169,996)             | (35,580)              | (4,348)           |
| 16                           | 283.00          | ACCUMULATED DEF INCOME TAX                | 12                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 17                           |                 | TOTAL DEFERRED INCOME TAXES               |                     | (381,731,924)              | (246,947,276)        | (34,839,494)                  | (35,328,134)                  | (23,145,828)          | (41,291,369)          | (179,824)         |
| 18                           | 235.00          | CUSTOMER DEPOSITS                         | 9                   | (2,838,227)                | (2,078,519)          | (708,507)                     | (51,202)                      | 0                     | 0                     | 0                 |
| 19                           | 252.00          | CUSTOMER ADVANCES                         | 5                   | 2,552                      | 1,433                | 236                           | 303                           | 205                   | 375                   | 0                 |
| 20                           |                 | RATE BASE                                 |                     | 1,915,996,457              | 1,225,209,544        | 175,172,624                   | 183,609,587                   | 120,227,140           | 210,892,957           | 884,604           |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
STATE/FEDERAL INCOME TAXES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

ALLOCATED COST OF SERVICE  
PEAK & AVERAGE

111, SCHEDULE 2

PAGE 11 OF 13

WITNESS: M. P. BALMERT

| LINE<br>NO.               | ACCT<br>NO.<br>(A)                            | ALLOC<br>FACTOR<br>(B) | TOTAL<br>COMPANY<br>(C)<br>\$ | RSS/RDS<br>(D)<br>\$ | SGSS1/SCD1/SGDS1<br>(E)<br>\$ | SGSS2/SCD2/SGDS2<br>(F)<br>\$ | SDS/LGSS<br>(G)<br>\$ | LDS/LGSS<br>(H)<br>\$ | MLDS<br>(I)<br>\$ |
|---------------------------|-----------------------------------------------|------------------------|-------------------------------|----------------------|-------------------------------|-------------------------------|-----------------------|-----------------------|-------------------|
| <u>STATE INCOME TAX</u>   |                                               |                        |                               |                      |                               |                               |                       |                       |                   |
| 1                         | OPERATING INCOME BEFORE TAXES (PG. 2, LINE 8) |                        | 140,065,217                   | 104,233,001          | 14,093,238                    | 16,792,653                    | 5,602,388             | (1,769,297)           | 1,113,235         |
| 2                         | STATUTORY ADJUSTMENTS                         | 12                     | (80,890,686)                  | (52,365,395)         | (7,387,746)                   | (7,479,962)                   | (4,872,046)           | (8,748,328)           | (37,210)          |
| 3                         | INTEREST ON DEBT                              |                        | (45,409,116)                  | (29,037,466)         | (4,151,591)                   | (4,351,547)                   | (2,849,383)           | (4,998,163)           | (20,965)          |
| 4                         | PA BONUS DEPRECIATION ADJUSTMENT              | 12                     | <u>(12,561,349)</u>           | <u>(8,131,715)</u>   | <u>(1,147,228)</u>            | <u>(1,161,548)</u>            | <u>(756,570)</u>      | <u>(1,358,510)</u>    | <u>(5,778)</u>    |
| 5                         | STATE TAXABLE INCOME                          |                        | 1,204,066                     | 14,698,425           | 1,406,673                     | 3,799,596                     | (2,875,612)           | (16,874,298)          | 1,049,282         |
| 6                         | NET OPERATING LOSS DEDUCTION                  | 12                     | <u>(481,626)</u>              | <u>(311,785)</u>     | <u>(43,987)</u>               | <u>(44,536)</u>               | <u>(29,008)</u>       | <u>(52,088)</u>       | <u>(222)</u>      |
|                           | STATE TAXABLE INCOME                          |                        | 722,440                       | 14,386,640           | 1,362,686                     | 3,755,060                     | (2,904,620)           | (16,926,386)          | 1,049,060         |
| 7                         | STATE NET INCOME TAX @ 9.99%                  |                        | 72,172                        | 1,437,225            | 136,132                       | 375,131                       | (290,172)             | (1,690,946)           | 104,801           |
| 8                         | DEFERRED INCOME TAXES                         | 12                     | <u>10,162</u>                 | <u>6,578</u>         | <u>928</u>                    | <u>940</u>                    | <u>612</u>            | <u>1,099</u>          | <u>5</u>          |
| 9                         | STATE INCOME TAX                              |                        | 82,334                        | 1,443,804            | 137,060                       | 376,070                       | (289,559)             | (1,689,847)           | 104,806           |
| <u>FEDERAL INCOME TAX</u> |                                               |                        |                               |                      |                               |                               |                       |                       |                   |
| 10                        | OPERATING INCOME BEFORE TAXES (PG. 2, LINE 8) |                        | 140,065,217                   | 104,233,001          | 14,093,238                    | 16,792,653                    | 5,602,388             | (1,769,297)           | 1,113,235         |
| 11                        | STATE NET INCOME TAX (LINE 7)                 |                        | (72,172)                      | (1,437,225)          | (136,132)                     | (375,131)                     | 290,172               | 1,690,946             | (104,801)         |
| 12                        | STATUTORY ADJUSTMENTS (LINES 2 & 3)           | 12                     | <u>(126,299,802)</u>          | <u>(81,402,861)</u>  | <u>(11,539,338)</u>           | <u>(11,831,509)</u>           | <u>(7,721,429)</u>    | <u>(13,746,491)</u>   | <u>(58,175)</u>   |
| 13                        | FEDERAL TAXABLE INCOME                        |                        | 13,693,243                    | 21,392,915           | 2,417,768                     | 4,586,014                     | (1,828,870)           | (13,824,842)          | 950,259           |
| 14                        | FEDERAL INCOME TAX @ 21%                      |                        | 2,875,581                     | 4,492,512            | 507,731                       | 963,063                       | (384,063)             | (2,903,217)           | 199,554           |
| 15                        | DEFERRED INCOME TAXES                         | 12                     | 18,403,387                    | 11,913,617           | 1,680,781                     | 1,701,761                     | 1,108,436             | 1,990,326             | 8,466             |
| 16                        | TAX REFUND AMORTIZATION                       | 12                     | 0                             | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 17                        | FLOW BACK OF EXCESS DEFERRED TAXES            | 12                     | (1,747,266)                   | (1,131,110)          | (159,578)                     | (161,570)                     | (105,238)             | (188,967)             | (804)             |
| 18                        | EFFECT OF CNIT DEFERRED TAX ON FIT            | 12                     | <u>(2,134)</u>                | <u>(1,382)</u>       | <u>(195)</u>                  | <u>(197)</u>                  | <u>(129)</u>          | <u>(231)</u>          | <u>(1)</u>        |
| 19                        | FEDERAL INCOME TAX                            |                        | 19,529,568                    | 15,273,637           | 2,028,740                     | 2,503,057                     | 619,007               | (1,102,088)           | 207,215           |
| 20                        | STATE NET INCOME TAX (LINE 9)                 |                        | <u>82,334</u>                 | <u>1,443,804</u>     | <u>137,060</u>                | <u>376,070</u>                | <u>(289,559)</u>      | <u>(1,689,847)</u>    | <u>104,806</u>    |
| 21                        | TOTAL INCOME TAXES                            |                        | <u>19,611,902</u>             | <u>16,717,441</u>    | <u>2,165,800</u>              | <u>2,879,127</u>              | <u>329,448</u>        | <u>(2,791,935)</u>    | <u>312,021</u>    |

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**ALLOCATION FACTORS**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019**

**ALLOCATED COST OF SERVICE**  
**PEAK & AVERAGE**

**111, SCHEDULE 2**

**PAGE 12 OF 13**

**WITNESS: M. P. BALMERT**

| <u>LINE NO.</u> | <u>DESCRIPTION</u><br>(A)                    | <u>ALLOC FACTOR</u><br>(B) | <u>TOTAL COMPANY</u><br>(C) | <u>RSS/RDS</u><br>(D) | <u>SGSS1/SCD1/SGDS1</u><br>(E) | <u>SGSS2/SCD2/SGDS2</u><br>(F) | <u>SDS/LGSS</u><br>(G) | <u>LDS/LGSS</u><br>(H) | <u>MLDS</u><br>(I) |
|-----------------|----------------------------------------------|----------------------------|-----------------------------|-----------------------|--------------------------------|--------------------------------|------------------------|------------------------|--------------------|
| 1               | DESIGN DAY                                   | 1                          | 791,440,000                 | 447,700,000           | 78,600,000                     | 102,800,000                    | 65,142,000             | 97,198,000             | 0                  |
| 2               | PERCENT                                      |                            | 100.000%                    | 56.568%               | 9.931%                         | 12.989%                        | 8.231%                 | 12.281%                | 0.000%             |
| 3               | THROUGHPUT EXCLUDING TRANSPORTATION          | 2                          | 37,219,347                  | 27,512,601            | 4,812,979                      | 4,055,014                      | 766,053                | 0                      | 72,700             |
| 4               | PERCENT                                      |                            | 100.000%                    | 73.921%               | 12.931%                        | 10.895%                        | 2.058%                 | 0.000%                 | 0.195%             |
| 5               | THROUGHPUT EXCLUDING MDS                     | 3                          | 77,383,630                  | 34,437,601            | 6,456,921                      | 8,835,480                      | 7,001,685              | 20,651,944             | 0                  |
| 6               | PERCENT                                      |                            | 100.000%                    | 44.502%               | 8.344%                         | 11.418%                        | 9.048%                 | 26.688%                | 0.000%             |
| 7               | GAS PURCHASED EXPENSE                        | 4                          | 163,506,936                 | 120,184,061           | 21,240,416                     | 18,646,735                     | 3,167,707              | 0                      | 268,017            |
| 8               | PERCENT                                      |                            | 100.000%                    | 73.504%               | 12.991%                        | 11.404%                        | 1.937%                 | 0.000%                 | 0.164%             |
| 9               | PEAK & AVERAGE MAINS                         | 5                          |                             |                       |                                |                                |                        |                        |                    |
| 10              | PERCENT                                      |                            | 100.000%                    | 56.162%               | 9.262%                         | 11.856%                        | 8.042%                 | 14.678%                | 0.000%             |
| 11              | AVERAGE NO. OF CUSTOMERS                     | 6                          | 434,281                     | 396,498               | 32,433                         | 4,819                          | 430                    | 90                     | 11                 |
| 12              | PERCENT                                      |                            | 100.000%                    | 91.299%               | 7.468%                         | 1.110%                         | 0.099%                 | 0.021%                 | 0.003%             |
| 13              | DISTRIBUTION UNCOLLECTIBLES                  | 7                          | 8,970,092                   | 8,659,104             | 167,619                        | 143,369                        | 0                      | 0                      | 0                  |
| 14              | PERCENT                                      |                            | 100.000%                    | 96.533%               | 1.869%                         | 1.598%                         | 0.000%                 | 0.000%                 | 0.000%             |
| 15              | CURRENT GMB/GTS REVENUE                      | 8                          | 39,195,616                  | 0                     | 379,333                        | 1,805,184                      | 17,639,825             | 17,899,205             | 1,472,069          |
| 16              | PERCENT                                      |                            | 100.001%                    | 0.000%                | 0.968%                         | 4.606%                         | 45.005%                | 45.666%                | 3.756%             |
| 17              | CUSTOMER DEPOSITS                            | 9                          | 2,227,377                   | 1,631,178             | 556,015                        | 40,184                         | 0                      | 0                      | 0                  |
| 18              | PERCENT                                      |                            | 100.000%                    | 73.233%               | 24.963%                        | 1.804%                         | 0.000%                 | 0.000%                 | 0.000%             |
| 19              | FORFEITED DISCOUNTS                          | 10                         | 1,192,278                   | 880,955               | 116,974                        | 110,646                        | 43,449                 | 37,195                 | 3,059              |
| 20              | PERCENT                                      |                            | 100.000%                    | 73.888%               | 9.811%                         | 9.280%                         | 3.644%                 | 3.120%                 | 0.257%             |
| 21              | DIST. PLANT EXCL ACCTS 375.70, 375.71, & 387 | 11                         | 2,632,013,410               | 1,703,357,935         | 240,157,119                    | 243,286,499                    | 158,776,341            | 285,265,133            | 1,170,384          |
| 22              | PERCENT                                      |                            | 100.000%                    | 64.718%               | 9.124%                         | 9.243%                         | 6.033%                 | 10.838%                | 0.044%             |
| 23              | GROSS PLANT                                  | 12                         | 2,737,191,110               | 1,771,947,204         | 249,996,869                    | 253,096,342                    | 164,862,447            | 296,025,256            | 1,262,992          |
| 24              | PERCENT                                      |                            | 100.000%                    | 64.736%               | 9.133%                         | 9.247%                         | 6.023%                 | 10.815%                | 0.046%             |
| 25              | MAINS - ACCOUNT 376                          | 13                         | 1,804,917,543               | 1,013,513,965         | 167,144,445                    | 213,956,440                    | 145,128,010            | 264,882,981            | 291,702            |
| 26              | PERCENT                                      |                            | 100.000%                    | 56.152%               | 9.261%                         | 11.854%                        | 8.041%                 | 14.676%                | 0.016%             |



**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**ALLOCATION FACTORS (CONT.)**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019**

**ALLOCATED COST OF SERVICE**  
**PEAK & AVERAGE**

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

| LINE NO. | DESCRIPTION<br>(A)                          | ALLOC FACTOR<br>(B) | TOTAL COMPANY<br>(C) | RSS/RDS<br>(D) | SGSS1/SCD1/SGDS1<br>(E) | SGSS2/SCD2/SGDS2<br>(F) | SDS/LGSS<br>(G) | LDS/LGSS<br>(H) | MLDS<br>(I) |
|----------|---------------------------------------------|---------------------|----------------------|----------------|-------------------------|-------------------------|-----------------|-----------------|-------------|
| 27       | COMPOSITE DIRECT PLANT - ACCTS 376 & 380    | 14                  | 2,397,334,606        | 1,551,705,308  | 212,357,566             | 221,296,463             | 146,212,130     | 265,469,472     | 293,668     |
| 28       | PERCENT                                     |                     | 100.000%             | 64.726%        | 8.858%                  | 9.231%                  | 6.099%          | 11.074%         | 0.012%      |
| 29       | SERVICES                                    | 15                  | 413,534,515          | 375,686,736    | 31,559,250              | 5,125,487               | 755,122         | 407,921         | 0           |
| 30       | PERCENT                                     |                     | 100.000%             | 90.847%        | 7.632%                  | 1.239%                  | 0.183%          | 0.099%          | 0.000%      |
| 31       | METERS                                      | 16                  | 29,582,143           | 22,267,185     | 4,764,566               | 2,226,579               | 250,017         | 69,958          | 3,838       |
| 32       | PERCENT                                     |                     | 100.000%             | 75.273%        | 16.106%                 | 7.527%                  | 0.845%          | 0.236%          | 0.013%      |
| 33       | INDUSTRIAL M & R                            | 17                  | 5,640,975            | 0              | 151,859                 | 968,514                 | 1,976,017       | 2,544,585       | 0           |
| 34       | PERCENT                                     |                     | 100.000%             | 0.000%         | 2.692%                  | 17.169%                 | 35.030%         | 45.109%         | 0.000%      |
| 35       | OTHER DISTRIBUTION O & M EXPENSES           | 18                  | 49,893,232           | 34,973,205     | 4,461,177               | 3,776,038               | 2,421,113       | 4,256,933       | 4,767       |
| 36       | PERCENT                                     |                     | 100.000%             | 70.096%        | 8.941%                  | 7.568%                  | 4.853%          | 8.532%          | 0.010%      |
| 37       | O & M EXCL GAS PUR, UNCOLLECTIBLES, & A & G | 19                  | 74,735,516           | 54,680,665     | 6,590,843               | 5,008,198               | 3,082,668       | 5,364,900       | 8,243       |
| 38       | PERCENT                                     |                     | 100.000%             | 73.165%        | 8.819%                  | 6.701%                  | 4.125%          | 7.179%          | 0.011%      |
| 39       | CUSTOMER/DEMAND MAINS                       | 20                  |                      |                |                         |                         |                 |                 |             |
| 40       | PERCENT                                     |                     | 100.000%             | 76.123%        | 8.749%                  | 7.008%                  | 4.863%          | 3.257%          | 0.000%      |
| 41       | HOUSE REGULATORS (GPA 383)                  | 21                  | 3,006,915            | 2,725,549      | 230,087                 | 45,166                  | 5,009           | 996             | 108         |
| 42       | PERCENT                                     |                     | 100.00%              | 90.642%        | 7.652%                  | 1.502%                  | 0.167%          | 0.033%          | 0.004%      |
| 43       | AVERAGE - ALLOCATORS 5 & 20                 | 22                  |                      |                |                         |                         |                 |                 |             |
| 44       | PERCENT                                     |                     | 100.00%              | 66.141%        | 9.006%                  | 9.432%                  | 6.453%          | 8.968%          | 0.000%      |
| 45       | METERS AND HOUSE REGULATORS                 | 23                  | 119,886,452          | 92,881,101     | 17,857,297              | 7,989,316               | 896,623         | 248,076         | 14,040      |
| 46       | PERCENT                                     |                     | 100.000%             | 77.474%        | 14.895%                 | 6.664%                  | 0.748%          | 0.207%          | 0.012%      |
| 47       | LABOR                                       | 24                  | 30,125,334           | 21,583,000     | 2,711,511               | 2,147,308               | 1,344,139       | 2,336,386       | 2,990       |
| 48       | PERCENT                                     |                     | 100.000%             | 71.643%        | 9.001%                  | 7.128%                  | 4.462%          | 7.756%          | 0.010%      |
| 49       | SALES AND CHOICE TRANSPORTATION             | 25                  | 46,510,327           | 34,437,601     | 6,205,037               | 5,028,935               | 766,053         | 0               | 72,700      |
| 50       | PERCENT                                     |                     | 100.000%             | 74.043%        | 13.341%                 | 10.813%                 | 1.647%          | 0.000%          | 0.156%      |
| 51       | C&I NETWORK CUSTOMERS                       | 26                  | 667                  | 0              | 0                       | 136                     | 430             | 90              | 11          |
| 52       | PERCENT                                     |                     | 100.000%             | 0.000%         | 0.000%                  | 20.390%                 | 64.468%         | 13.493%         | 1.649%      |

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

DOCKET NO.: R-2018-2647577

WITNESS: M. P. BALMERT

STUDY TYPE: AVERAGE STUDY- ALLOCATORS 5 & 20

FORECASTED TEST YEAR: DECEMBER 31, 2019

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, 2019

ALLOCATED COST OF SERVICE  
AVERAGE STUDY- ALLOCATORS 5 & 20

111, SCHEDULE 3  
PAGE 1 OF 13  
WITNESS: M. P. BALMERT

| LINE<br>NO. | ACCOUNT TITLE<br>(A)                           | ALLOC<br>FACTOR<br>(B) | TOTAL<br>COMPANY<br>(C)<br>\$ | RSS/RDS<br>(D)<br>\$ | SGSS1/SCD1/SGDS1<br>(E)<br>\$ | SGSS2/SCD2/SGDS2<br>(F)<br>\$ | SDS/LGSS<br>(G)<br>\$ | LDS/LGSS<br>(H)<br>\$ | MLDS<br>(I)<br>\$ |
|-------------|------------------------------------------------|------------------------|-------------------------------|----------------------|-------------------------------|-------------------------------|-----------------------|-----------------------|-------------------|
| 1           | TOTAL REVENUE [PAGE 6]                         |                        | 622,285,201                   | 462,878,823          | 58,830,240                    | 55,532,112                    | 23,458,825            | 20,067,473            | 1,517,729         |
| 2           | PRODUCTS PURCHASED [PAGE 7]                    |                        | 163,506,936                   | 120,184,061          | 21,240,416                    | 18,646,735                    | 3,167,707             | 0                     | 268,017           |
| 3           | OPERATING & MAINTENANCE EXPENSES [PAGES 7 & 8] |                        | 191,576,058                   | 155,129,474          | 13,622,581                    | 9,079,937                     | 6,283,537             | 7,409,804             | 50,724            |
| 4           | DEPRECIATION & AMORTIZATION [PAGE 5]           |                        | 77,301,907                    | 56,012,692           | 6,882,580                     | 5,609,512                     | 3,798,154             | 4,955,651             | 43,319            |
| 5           | TAXES OTHER THAN INCOME [PAGE 9]               |                        | <u>3,456,803</u>              | <u>2,630,471</u>     | <u>306,545</u>                | <u>210,741</u>                | <u>131,504</u>        | <u>177,045</u>        | <u>497</u>        |
| 6           | TOTAL EXPENSES & TAXES OTHER THAN INCOME       |                        | 435,841,705                   | 333,956,698          | 42,052,122                    | 33,546,926                    | 13,380,902            | 12,542,500            | 362,556           |
| 7           | OPERATING INCOME BEFORE TAXES                  |                        | 186,443,497                   | 128,922,125          | 16,778,118                    | 21,985,186                    | 10,077,923            | 7,524,973             | 1,155,173         |
| 8           | INCOME TAXES                                   |                        | 31,547,473                    | 21,149,529           | 2,906,050                     | 4,682,254                     | 1,787,246             | 699,581               | 322,814           |
| 9           | INVESTMENT TAX CREDIT                          | 12                     | <u>(299,568)</u>              | <u>(215,566)</u>     | <u>(26,805)</u>               | <u>(22,444)</u>               | <u>(14,598)</u>       | <u>(20,017)</u>       | <u>(138)</u>      |
| 10          | NET INCOME TAXES                               |                        | 31,247,905                    | 20,933,963           | 2,879,244                     | 4,659,810                     | 1,772,648             | 679,563               | 322,676           |
| 11          | OPERATING INCOME                               |                        | 155,195,592                   | 107,988,163          | 13,898,873                    | 17,325,376                    | 8,305,274             | 6,845,409             | 832,497           |
| 12          | RATE BASE [PAGE 10]                            |                        | 1,915,996,457                 | 1,366,314,386        | 171,552,028                   | 149,335,682                   | 97,757,522            | 130,152,235           | 884,604           |
| 13          | RATE OF RETURN EARNED ON RATE BASE             |                        | 8.100%                        | 7.904%               | 8.102%                        | 11.602%                       | 8.496%                | 5.260%                | 94.110%           |
| 14          | UNITIZED RETURN                                |                        | 1.00                          | 0.98                 | 1.00                          | 1.43                          | 1.05                  | 0.65                  | 11.62             |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
RATE OF RETURN BY CLASS - CURRENT @ CURRENT RATES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

ALLOCATED COST OF SERVICE  
AVERAGE STUDY- ALLOCATORS 5 & 20

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

| LINE<br>NO. | ACCOUNT TITLE<br>(A)                           | ALLOC<br>FACTOR<br>(B) | TOTAL<br>COMPANY<br>(C)<br>\$ | RSS/RDS<br>(D)<br>\$ | SGSS1/SCD1/SGDS1<br>(E)<br>\$ | SGSS2/SCD2/SGDS2<br>(F)<br>\$ | SDS/LGSS<br>(G)<br>\$ | LDS/LGSS<br>(H)<br>\$ | MLDS<br>(I)<br>\$ |
|-------------|------------------------------------------------|------------------------|-------------------------------|----------------------|-------------------------------|-------------------------------|-----------------------|-----------------------|-------------------|
| 1           | TOTAL REVENUE [PAGE 6]                         |                        | 575,348,119                   | 425,173,518          | 56,439,525                    | 53,366,071                    | 20,954,923            | 17,938,797            | 1,475,286         |
| 2           | PRODUCTS PURCHASED [PAGE 7]                    |                        | 163,506,936                   | 120,184,061          | 21,240,416                    | 18,646,735                    | 3,167,707             | 0                     | 268,017           |
| 3           | OPERATING & MAINTENANCE EXPENSES [PAGES 7 & 8] |                        | 191,017,256                   | 154,680,580          | 13,594,119                    | 9,054,150                     | 6,253,728             | 7,384,462             | 50,219            |
| 4           | DEPRECIATION & AMORTIZATION [PAGE 5]           |                        | 77,301,907                    | 56,012,692           | 6,882,580                     | 5,609,512                     | 3,798,154             | 4,955,651             | 43,319            |
| 5           | TAXES OTHER THAN INCOME [PAGE 9]               |                        | <u>3,456,803</u>              | <u>2,630,471</u>     | <u>306,545</u>                | <u>210,741</u>                | <u>131,504</u>        | <u>177,045</u>        | <u>497</u>        |
| 6           | TOTAL EXPENSES & TAXES OTHER THAN INCOME       |                        | 435,282,902                   | 333,507,803          | 42,023,660                    | 33,521,138                    | 13,351,092            | 12,517,158            | 362,051           |
| 7           | OPERATING INCOME BEFORE TAXES                  |                        | 140,065,217                   | 91,665,715           | 14,415,865                    | 19,844,933                    | 7,603,831             | 5,421,640             | 1,113,235         |
| 8           | INCOME TAXES [PAGE 11]                         |                        | 19,611,902                    | 11,561,495           | 2,298,118                     | 4,131,454                     | 1,150,532             | 158,282               | 312,021           |
| 9           | INVESTMENT TAX CREDIT                          | 12                     | <u>(299,568)</u>              | <u>(215,566)</u>     | <u>(26,805)</u>               | <u>(22,444)</u>               | <u>(14,598)</u>       | <u>(20,017)</u>       | <u>(138)</u>      |
| 10          | NET INCOME TAXES                               |                        | 19,312,334                    | 11,345,928           | 2,271,312                     | 4,109,010                     | 1,135,934             | 138,265               | 311,883           |
| 11          | OPERATING INCOME                               |                        | 120,752,883                   | 80,319,786           | 12,144,553                    | 15,735,923                    | 6,467,897             | 5,283,374             | 801,351           |
| 12          | RATE BASE [PAGE 10]                            |                        | 1,915,996,457                 | 1,366,314,386        | 171,552,028                   | 149,335,682                   | 97,757,522            | 130,152,235           | 884,604           |
| 13          | RATE OF RETURN EARNED ON RATE BASE             |                        | 6.302%                        | 5.879%               | 7.079%                        | 10.537%                       | 6.616%                | 4.059%                | 90.589%           |
| 14          | UNITIZED RETURN                                |                        | 1.00                          | 0.93                 | 1.12                          | 1.67                          | 1.05                  | 0.64                  | 14.37             |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
GROSS PLANT (Accounts 101 & 106)  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

ALLOCATED COST OF SERVICE  
AVERAGE STUDY- ALLOCATORS 5 & 20

111, SCHEDULE 3

PAGE 3 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           | 42,397,572           | 30,507,597           | 3,789,919          | 3,173,458          | 2,069,002          | 2,838,941          | 18,655           |
| 2        | 301-305   | INTANGIBLE PLANT - C&I NETWORK ONLY        | 26           | 1,612,791            | 0                    | 0                  | 328,848            | 1,039,734          | 217,614            | 26,595           |
| 3        | 350-362   | UNDERGROUND STORAGE PLANT                  | 25           | 5,856,461            | 4,336,300            | 781,311            | 633,259            | 96,456             | 0                  | 9,136            |
|          |           | <u>DISTRIBUTION PLANT</u>                  |              |                      |                      |                    |                    |                    |                    |                  |
| 4        | 374.10    | LAND - CITY GATE & M/L IND M&R             | 22           | 21,944               | 14,514               | 1,976              | 2,070              | 1,416              | 1,968              | 0                |
| 5        | 374.20    | LAND - OTHER DISTRIBUTION                  | 22           | 477,102              | 315,560              | 42,968             | 45,000             | 30,787             | 42,787             | 0                |
| 6        | 374.30    | LAND RIGHTS - CITY GATE MAIN LINE          | 22           | 95,361               | 63,073               | 8,588              | 8,994              | 6,154              | 8,552              | 0                |
| 7        | 374.40    | LAND RIGHTS - OTHER DISTRIBUTION           | 22           | 3,032,712            | 2,005,866            | 273,126            | 286,045            | 195,701            | 271,974            | 0                |
| 8        | 374.40    | DIRECT - LAND RIGHTS-OTHER DISTRIBUTION    |              | 0                    | 0                    | 0                  | 0                  | 0                  | 0                  | 0                |
| 9        | 374.41    | LAND RIGHTS - OTHER DISTRIBUTION LOC       | 22           | 13                   | 11                   | 1                  | 0                  | 0                  | 1                  | 0                |
| 10       | 374.50    | RIGHTS OF WAY                              | 22           | 3,233,092            | 2,138,400            | 291,172            | 304,945            | 208,631            | 289,944            | 0                |
| 11       | 374.50    | DIRECT - RIGHTS OF WAY                     |              | 51                   | 0                    | 0                  | 0                  | 0                  | 0                  | 51               |
| 12       | 375.20    | M & R STRUCTURES - CITY GATE               | 22           | 7,026                | 4,647                | 633                | 663                | 453                | 630                | 0                |
| 13       | 375.31    | M & R STRUCTURES - LOCAL GAS PURCH         | 22           | 4,012                | 2,654                | 361                | 378                | 259                | 360                | 0                |
| 14       | 375.40    | M & R STRUCTURES - REGULATING              | 22           | 4,752,758            | 3,143,522            | 428,033            | 448,280            | 306,695            | 426,227            | 0                |
| 15       | 375.40    | DIRECT - M & R STRUCTURES - REGULATING     | 22           | 30,949               | 0                    | 0                  | 0                  | 0                  | 0                  | 30,949           |
| 16       | 375.60    | M & R STRUCTURES - DIST. IND. M & R        | 17           | 87,670               | 0                    | 2,360              | 15,052             | 30,711             | 39,547             | 0                |
| 17       | 375.70    | M & R STRUCTURES - OTHER                   | 11           | 9,600,426            | 6,908,083            | 858,182            | 718,592            | 468,501            | 642,845            | 4,224            |
| 18       | 375.71    | M & R STRUCTURES - OTHER LEASED            | 11           | 5,092,381            | 3,664,273            | 455,208            | 381,165            | 248,508            | 340,986            | 2,241            |
| 19       | 375.80    | M & R STRUCTURES - COMMUNICATION           | 22           | 16,515               | 10,923               | 1,487              | 1,558              | 1,066              | 1,481              | 0                |
| 20       | 376.00    | MAINS                                      | 22           | 1,713,900,920        | 1,133,591,207        | 154,353,917        | 161,655,135        | 110,598,026        | 153,702,635        | 0                |
| 21       | 376.00    | DIRECT - MAINS - MDS                       |              | 210,855              | 0                    | 0                  | 0                  | 0                  | 0                  | 210,855          |
| 22       | 376.08    | MAINS-CSL REPLACEMENTS                     | 22           | 23,760,169           | 15,715,214           | 2,139,841          | 2,241,059          | 1,533,244          | 2,130,812          | 0                |
| 23       | 376.30    | MAINS-BARE STEEL                           | 22           | 66,563,956           | 44,026,066           | 5,994,750          | 6,278,312          | 4,295,372          | 5,969,456          | 0                |
| 24       | 376.30    | DIRECT - MAINS-BARE STEEL                  |              | 80,847               | 0                    | 0                  | 0                  | 0                  | 0                  | 80,847           |
| 25       | 376.80    | MAINS-CAST IRON                            | 22           | 400,795              | 265,090              | 36,096             | 37,803             | 25,863             | 35,943             | 0                |
| 26       | 378.10    | M & R EQUIP - GENERAL                      | 22           | 1,371,450            | 907,091              | 123,513            | 129,355            | 88,500             | 122,992            | 0                |
| 27       | 378.20    | M & R EQUIP - GENERAL - REGULATING         | 22           | 91,022,247           | 60,203,025           | 8,197,464          | 8,585,218          | 5,873,666          | 8,162,875          | 0                |
| 28       | 378.20    | DIRECT - M & R EQUIP-GEN-REG               |              | 458,058              | 0                    | 0                  | 0                  | 0                  | 0                  | 458,058          |
| 29       | 378.30    | M & R EQUIP - LOCAL GAS PURCHASES          | 22           | 471,962              | 312,160              | 42,505             | 44,515             | 30,456             | 42,326             | 0                |
| 30       | 379.10    | M & R EQUIP - CITY GATE                    | 22           | 140,677              | 93,045               | 12,669             | 13,269             | 9,078              | 12,616             | 0                |
| 31       | 379.11    | M & R EQUIP - EXCHANGE GAS                 | 22           | (450)                | (298)                | (41)               | (42)               | (29)               | (40)               | 0                |
| 32       | 380.00    | SERVICES                                   | 15           | 592,415,097          | 538,191,343          | 45,213,120         | 7,340,023          | 1,084,120          | 586,491            | 0                |
| 33       | 380.00    | DIRECT - SERVICES                          |              | 1,966                | 0                    | 0                  | 0                  | 0                  | 0                  | 1,966            |
| 34       | 380.12    | CSL REPLACEMENT                            | 15           | 0                    | 0                    | 0                  | 0                  | 0                  | 0                  | 0                |
| 35       | 381.00    | METERS                                     | 16           | 40,150,510           | 30,222,493           | 6,466,641          | 3,022,129          | 339,272            | 94,755             | 5,220            |
| 36       | 381.10    | AUTOMATIC METER READING                    | 16           | 19,350,242           | 14,565,508           | 3,116,550          | 1,456,493          | 163,510            | 45,667             | 2,516            |
| 37       | 381.10    | AUTOMATIC METER READING - C&I NET ONLY     | 26           | 4,600,627            | 0                    | 0                  | 938,068            | 2,965,932          | 620,763            | 75,864           |
| 38       | 382.00    | METER INSTALLATIONS                        | 16           | 43,214,952           | 32,529,191           | 6,960,200          | 3,252,789          | 365,166            | 101,987            | 5,618            |
| 39       | 383.00    | HOUSE REGULATORS                           | 21           | 13,305,976           | 12,060,802           | 1,018,173          | 199,856            | 22,221             | 4,391              | 532              |
| 40       | 384.00    | HOUSE REG INSTALLATIONS                    | 21           | 3,864,772            | 3,503,107            | 295,732            | 58,049             | 6,454              | 1,275              | 155              |
| 41       | 385.00    | IND M&R EQUIPMENT                          | 17           | 8,110,311            | 0                    | 218,330            | 1,392,459          | 2,841,042          | 3,658,480          | 0                |
| 42       | 385.00    | DIRECT - IND M&R EQUIPMENT                 |              | 373,618              | 0                    | 0                  | 0                  | 0                  | 0                  | 373,618          |
| 43       | 385.10    | IND M&R EQUIPMENT - LG VOLUME              | 17           | 1,085,273            | 0                    | 29,216             | 186,331            | 380,171            | 489,556            | 0                |
| 44       | 387.10    | OTHER EQUIP DISTRIBUTION                   | 11           | 19,450               | 13,996               | 1,739              | 1,456              | 949                | 1,302              | 9                |
| 45       | 387.20    | OTHER EQUIP ODORIZATION                    | 11           | 117,248              | 84,367               | 10,481             | 8,776              | 5,722              | 7,851              | 52               |
| 46       | 387.42    | OTHER EQUIP RADIO                          | 11           | 119,609              | 86,066               | 10,692             | 8,953              | 5,837              | 8,009              | 53               |
| 47       | 387.44    | OTHER EQUIP COMMUNICATION                  | 11           | 627,109              | 451,243              | 56,057             | 46,939             | 30,603             | 41,991             | 276              |
| 48       | 387.46    | OTHER EQUIP CUSTOMER INFO SERVICE          | 11           | 7,441,517            | 5,354,618            | 665,197            | 556,998            | 363,146            | 498,284            | 3,274            |
| 49       | 387.45    | DIRECT - OTHER EQUIP CUSTOMER INFO SERVICE |              | 39,788               | 0                    | 0                  | 0                  | 0                  | 0                  | 39,788           |
| 50       | 387.50    | GPS EQUIPMENT                              | 11           | <u>2,053,366</u>     | <u>1,477,520</u>     | <u>183,550</u>     | <u>153,694</u>     | <u>100,204</u>     | <u>137,493</u>     | <u>904</u>       |
| 51       |           | TOTAL DISTRIBUTION PLANT                   |              | 2,661,724,931        | 1,911,924,379        | 237,510,489        | 199,820,379        | 132,627,407        | 178,545,210        | 1,297,067        |
| 52       | 389-398   | GENERAL PLANT                              | 11           | <u>31,812,773</u>    | <u>22,891,199</u>    | <u>2,843,744</u>   | <u>2,381,186</u>   | <u>1,552,463</u>   | <u>2,130,183</u>   | <u>13,998</u>    |
| 53       |           | TOTAL GROSS PLANT                          |              | <u>2,741,791,737</u> | <u>1,969,659,474</u> | <u>244,925,462</u> | <u>206,008,283</u> | <u>136,345,327</u> | <u>183,514,335</u> | <u>1,338,856</u> |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
DEPRECIATION RESERVE  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

ALLOCATED COST OF SERVICE  
AVERAGE STUDY- ALLOCATORS 5 & 20

111, SCHEDULE 3

PAGE 4 OF 13

WITNESS: M. P. BALMERT

| LINE NO.                  | ACCT. NO.<br>(A) | ACCOUNT TITLE<br>(B)                       | ALLOC FACTOR<br>(C) | TOTAL COMPANY<br>(D)<br>\$ | RSS/RDS<br>(E)<br>\$ | SGSS1/SCD1/SGDS1<br>(F)<br>\$ | SGSS2/SCD2/SGDS2<br>(G)<br>\$ | SDS/LGSS<br>(H)<br>\$ | LDS/LGSS<br>(I)<br>\$ | MLDS<br>(J)<br>\$ |
|---------------------------|------------------|--------------------------------------------|---------------------|----------------------------|----------------------|-------------------------------|-------------------------------|-----------------------|-----------------------|-------------------|
| 1                         | 301-305          | INTANGIBLE PLANT                           | 11                  | 15,661,171                 | 11,269,152           | 1,399,952                     | 1,172,239                     | 764,265               | 1,048,672             | 6,891             |
| 2                         | 301-305          | INTANGIBLE PLANT - C&I NETWORK ONLY        | 26                  | 107,519                    | 0                    | 0                             | 21,923                        | 69,315                | 14,508                | 1,773             |
| 3                         | 350-362          | UNDERGROUND STORAGE PLANT                  | 25                  | 4,221,137                  | 3,125,457            | 563,142                       | 456,432                       | 69,522                | 0                     | 6,585             |
| <b>DISTRIBUTION PLANT</b> |                  |                                            |                     |                            |                      |                               |                               |                       |                       |                   |
| 4                         | 374.10           | LAND - CITY GATE & M/L IND M&R             | 22                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 5                         | 374.20           | LAND - OTHER DISTRIBUTION                  | 22                  | 134,737                    | 89,116               | 12,134                        | 12,708                        | 8,695                 | 12,083                | 0                 |
| 6                         | 374.30           | LAND RIGHTS - CITY GATE MAIN LINE          | 22                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 7                         | 374.40           | LAND RIGHTS - OTHER DISTRIBUTION           | 22                  | 718,506                    | 475,227              | 64,709                        | 67,770                        | 46,365                | 64,436                | 0                 |
| 8                         | 374.40           | DIRECT - LAND RIGHTS-OTHER DISTRIBUTION    | 22                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 9                         | 374.41           | LAND RIGHTS - OTHER DISTRIBUTION LOC       | 22                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 10                        | 374.50           | RIGHTS OF WAY                              | 22                  | 1,723,916                  | 1,140,215            | 155,256                       | 162,600                       | 111,244               | 154,601               | 0                 |
| 11                        | 374.50           | DIRECT - RIGHTS OF WAY                     | 22                  | 32                         | 0                    | 0                             | 0                             | 0                     | 0                     | 32                |
| 12                        | 375.20           | M & R STRUCTURES - CITY GATE               | 22                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 13                        | 375.31           | M & R STRUCTURES - LOCAL GAS PURCH         | 22                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 14                        | 375.40           | M & R STRUCTURES - REGULATING              | 22                  | 1,344,493                  | 889,261              | 121,085                       | 126,813                       | 86,760                | 120,574               | 0                 |
| 15                        | 375.40           | DIRECT - M & R STRUCTURES - REGULATING     | 22                  | 4,888                      | 0                    | 0                             | 0                             | 0                     | 0                     | 4,888             |
| 16                        | 375.60           | M & R STRUCTURES - DIST. IND. M & R        | 17                  | 75,984                     | 0                    | 2,046                         | 13,046                        | 26,617                | 34,276                | 0                 |
| 17                        | 375.70           | M & R STRUCTURES - OTHER                   | 11                  | 3,144,496                  | 2,262,654            | 281,087                       | 235,366                       | 153,451               | 210,556               | 1,384             |
| 18                        | 375.71           | M & R STRUCTURES - OTHER LEASED            | 11                  | 1,300,385                  | 935,705              | 116,241                       | 97,334                        | 63,459                | 87,074                | 572               |
| 19                        | 375.80           | M & R STRUCTURES - COMMUNICATION           | 22                  | 7,601                      | 5,027                | 685                           | 717                           | 491                   | 682                   | 0                 |
| 20                        | 376.00           | MAINS                                      | 22                  | 202,910,952                | 134,207,333          | 18,274,160                    | 19,138,561                    | 13,093,844            | 18,197,054            | 0                 |
| 21                        | 376.00           | DIRECT - MAINS - MDS                       | 22                  | 71,722                     | 0                    | 0                             | 0                             | 0                     | 0                     | 71,722            |
| 22                        | 376.08           | MAINS-CSL REPLACEMENTS                     | 22                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 23                        | 376.30           | MAINS-BARE STEEL                           | 22                  | 45,994,822                 | 30,421,435           | 4,142,294                     | 4,338,232                     | 2,968,046             | 4,124,816             | 0                 |
| 24                        | 376.30           | DIRECT - MAINS-BARE STEEL                  | 22                  | 82,385                     | 0                    | 0                             | 0                             | 0                     | 0                     | 82,385            |
| 25                        | 376.80           | MAINS-CAST IRON                            | 22                  | 237,129                    | 156,840              | 21,356                        | 22,366                        | 15,302                | 21,266                | 0                 |
| 26                        | 378.10           | M & R EQUIP - GENERAL                      | 22                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 27                        | 378.20           | M & R EQUIP - GENERAL - REGULATING         | 22                  | 13,158,592                 | 8,703,225            | 1,185,063                     | 1,241,118                     | 849,124               | 1,180,063             | 0                 |
| 28                        | 378.20           | DIRECT - M & R EQUIP-GEN-REG               | 22                  | 54,530                     | 0                    | 0                             | 0                             | 0                     | 0                     | 54,530            |
| 29                        | 378.30           | M & R EQUIP - LOCAL GAS PURCHASES          | 22                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 30                        | 379.10           | M & R EQUIP - CITY GATE                    | 22                  | 104,131                    | 68,873               | 9,378                         | 9,822                         | 6,720                 | 9,339                 | 0                 |
| 31                        | 379.11           | M & R EQUIP - EXCHANGE GAS                 | 22                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 32                        | 380.00           | SERVICES                                   | 15                  | 135,665,837                | 123,248,343          | 10,354,017                    | 1,680,900                     | 248,269               | 134,309               | 0                 |
| 33                        | 380.00           | DIRECT - SERVICES                          | 15                  | 1,920                      | 0                    | 0                             | 0                             | 0                     | 0                     | 1,920             |
| 34                        | 380.12           | CSL REPLACEMENT                            | 15                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 35                        | 381.00           | METERS                                     | 16                  | 17,411,447                 | 13,106,119           | 2,804,288                     | 1,310,560                     | 147,127               | 41,091                | 2,264             |
| 36                        | 381.10           | AUTOMATIC METER READING                    | 16                  | 13,729,683                 | 10,334,744           | 2,211,303                     | 1,033,433                     | 116,016               | 32,402                | 1,785             |
| 37                        | 381.10           | AUTOMATIC METER READING - C&I NET ONLY     | 26                  | 102,236                    | 0                    | 0                             | 20,846                        | 65,910                | 13,795                | 1,686             |
| 38                        | 382.00           | METER INSTALLATIONS                        | 16                  | 13,549,487                 | 10,199,105           | 2,182,280                     | 1,019,870                     | 114,493               | 31,977                | 1,761             |
| 39                        | 383.00           | HOUSE REGULATORS                           | 21                  | 4,334,095                  | 3,928,510            | 331,645                       | 65,098                        | 7,238                 | 1,430                 | 173               |
| 40                        | 384.00           | HOUSE REG INSTALLATIONS                    | 21                  | 3,112,325                  | 2,821,074            | 238,155                       | 46,747                        | 5,198                 | 1,027                 | 125               |
| 41                        | 385.00           | IND M&R EQUIPMENT                          | 17                  | 3,051,516                  | 0                    | 82,147                        | 523,915                       | 1,068,946             | 1,376,508             | 0                 |
| 42                        | 385.00           | DIRECT - IND M&R EQUIPMENT                 | 17                  | 110,824                    | 0                    | 0                             | 0                             | 0                     | 0                     | 110,824           |
| 43                        | 385.10           | IND M&R EQUIPMENT - LG VOLUME              | 17                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 44                        | 387.10           | OTHER EQUIP DISTRIBUTION                   | 11                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 45                        | 387.20           | OTHER EQUIP ODORIZATION                    | 11                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 46                        | 387.42           | OTHER EQUIP RADIO                          | 11                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 47                        | 387.44           | OTHER EQUIP COMMUNICATION                  | 11                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 48                        | 387.46           | OTHER EQUIP CUSTOMER INFO SERVICE          | 11                  | 2,037,372                  | 1,466,012            | 182,121                       | 152,497                       | 99,424                | 136,422               | 896               |
| 49                        | 387.45           | DIRECT - OTHER EQUIP CUSTOMER INFO SERVICE | 11                  | 2,631                      | 0                    | 0                             | 0                             | 0                     | 0                     | 2,631             |
| 50                        | 387.50           | GPS EQUIPMENT                              | 11                  | <u>1,049,356</u>           | <u>755,075</u>       | <u>93,802</u>                 | <u>78,544</u>                 | <u>51,209</u>         | <u>70,265</u>         | <u>462</u>        |
| 51                        |                  | TOTAL DISTRIBUTION PLANT                   |                     | 465,228,030                | 345,213,892          | 42,865,249                    | 31,398,861                    | 19,353,945            | 26,056,044            | 340,040           |
| 52                        | 389-398          | GENERAL PLANT                              | 11                  | <u>14,119,387</u>          | <u>10,159,746</u>    | <u>1,262,132</u>              | <u>1,056,836</u>              | <u>689,026</u>        | <u>945,434</u>        | <u>6,213</u>      |
| 53                        |                  | TOTAL DEPRECIATION RESERVE                 |                     | <u>499,229,725</u>         | <u>369,768,247</u>   | <u>46,090,475</u>             | <u>34,084,367</u>             | <u>20,876,758</u>     | <u>28,050,150</u>     | <u>359,729</u>    |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
DEPRECIATION AND AMORTIZATION EXPENSE  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

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)<br>\$ | RSS/RDS (E)<br>\$ | SGSS1/SCD1/SGDS1 (F)<br>\$ | SGSS2/SCD2/SGDS2 (G)<br>\$ | SDS/LGSS (H)<br>\$ | LDS/LGSS (I)<br>\$ | MLDS (J)<br>\$ |
|---------------------------|---------------------------------------------|--------------------------------------------|------------------|-------------------------|-------------------|----------------------------|----------------------------|--------------------|--------------------|----------------|
| 1                         | 301-305                                     | INTANGIBLE PLANT                           | 11               | 4,872,321               | 3,505,927         | 435,537                    | 364,693                    | 237,769            | 326,251            | 2,144          |
| 2                         | 301-305                                     | INTANGIBLE PLANT - C&I NETWORK ONLY        | 26               | 322,558                 | (0)               | 0                          | 65,770                     | 207,947            | 43,523             | 5,319          |
| 3                         | 350-362                                     | UNDERGROUND STORAGE PLANT                  | 25               | 284,786                 | 210,864           | 37,993                     | 30,794                     | 4,690              | 0                  | 444            |
| <u>DISTRIBUTION PLANT</u> |                                             |                                            |                  |                         |                   |                            |                            |                    |                    |                |
| 4                         | 374.10                                      | LAND - CITY GATE & M/L IND M&R             | 22               | 0                       | 0                 | 0                          | 0                          | 0                  | 0                  | 0              |
| 5                         | 374.20                                      | LAND - OTHER DISTRIBUTION                  | 22               | 0                       | 0                 | 0                          | 0                          | 0                  | 0                  | 0              |
| 6                         | 374.30                                      | LAND RIGHTS - CITY GATE MAIN LINE          | 22               | 0                       | 0                 | 0                          | 0                          | 0                  | 0                  | 0              |
| 7                         | 374.40                                      | LAND RIGHTS - OTHER DISTRIBUTION           | 22               | 52,833                  | 34,944            | 4,758                      | 4,983                      | 3,409              | 4,738              | 0              |
| 8                         | 374.40                                      | DIRECT - LAND RIGHTS-OTHER DISTRIBUTION    | 22               | 0                       | 0                 | 0                          | 0                          | 0                  | 0                  | 0              |
| 9                         | 374.41                                      | LAND RIGHTS - OTHER DISTRIBUTION LOC       | 22               | 0                       | 0                 | 0                          | 0                          | 0                  | 0                  | 0              |
| 10                        | 374.50                                      | RIGHTS OF WAY                              | 22               | 35,298                  | 23,347            | 3,179                      | 3,329                      | 2,278              | 3,166              | 0              |
| 11                        | 374.50                                      | DIRECT - RIGHTS OF WAY                     | 22               | 1                       | 0                 | 0                          | 0                          | 0                  | 0                  | 1              |
| 12                        | 375.20                                      | M & R STRUCTURES - CITY GATE               | 22               | 0                       | 0                 | 0                          | 0                          | 0                  | 0                  | 0              |
| 13                        | 375.31                                      | M & R STRUCTURES - LOCAL GAS PURCH         | 22               | 0                       | 0                 | 0                          | 0                          | 0                  | 0                  | 0              |
| 14                        | 375.40                                      | M & R STRUCTURES - REGULATING              | 22               | 124,570                 | 82,392            | 11,219                     | 11,750                     | 8,039              | 11,171             | 0              |
| 15                        | 375.40                                      | DIRECT - M & R STRUCTURES - REGULATING     | 22               | 438                     | 0                 | 0                          | 0                          | 0                  | 0                  | 438            |
| 16                        | 375.60                                      | M & R STRUCTURES - DIST. IND. M & R        | 17               | 545                     | 0                 | 15                         | 94                         | 191                | 246                | 0              |
| 17                        | 375.70                                      | M & R STRUCTURES - OTHER                   | 11               | 313,877                 | 225,853           | 28,058                     | 23,494                     | 15,317             | 21,017             | 138            |
| 18                        | 375.71                                      | M & R STRUCTURES - OTHER LEASED            | 11               | 224,318                 | 161,410           | 20,052                     | 16,790                     | 10,947             | 15,020             | 99             |
| 19                        | 375.80                                      | M & R STRUCTURES - COMMUNICATION           | 22               | 365                     | 241               | 33                         | 34                         | 24                 | 33                 | 0              |
| 20                        | 376.00                                      | MAINS                                      | 22               | 38,572,693              | 25,512,365        | 3,473,857                  | 3,638,176                  | 2,489,096          | 3,459,199          | 0              |
| 21                        | 376.00                                      | DIRECT - MAINS - MDS                       | 22               | 3,616                   | 0                 | 0                          | 0                          | 0                  | 0                  | 3,616          |
| 22                        | 376.08                                      | MAINS-CSL REPLACEMENTS                     | 22               | 0                       | 0                 | 0                          | 0                          | 0                  | 0                  | 0              |
| 23                        | 376.30                                      | MAINS-BARE STEEL                           | 22               | 401,985                 | 265,877           | 36,203                     | 37,915                     | 25,940             | 36,050             | 0              |
| 24                        | 376.30                                      | DIRECT - MAINS-BARE STEEL                  | 22               | 2,622                   | 0                 | 0                          | 0                          | 0                  | 0                  | 2,622          |
| 25                        | 376.80                                      | MAINS-CAST IRON                            | 22               | 6,932                   | 4,585             | 624                        | 654                        | 447                | 622                | 0              |
| 26                        | 378.10                                      | M & R EQUIP - GENERAL                      | 22               | 0                       | 0                 | 0                          | 0                          | 0                  | 0                  | 0              |
| 27                        | 378.20                                      | M & R EQUIP - GENERAL - REGULATING         | 22               | 3,603,117               | 2,383,138         | 324,497                    | 339,846                    | 232,509            | 323,128            | 0              |
| 28                        | 378.20                                      | DIRECT - M & R EQUIP-GEN-REG               | 22               | 12,093                  | 0                 | 0                          | 0                          | 0                  | 0                  | 12,093         |
| 29                        | 378.30                                      | M & R EQUIP - LOCAL GAS PURCHASES          | 22               | 0                       | 0                 | 0                          | 0                          | 0                  | 0                  | 0              |
| 30                        | 379.10                                      | M & R EQUIP - CITY GATE                    | 22               | 3,534                   | 2,338             | 318                        | 333                        | 228                | 317                | 0              |
| 31                        | 379.11                                      | M & R EQUIP - EXCHANGE GAS                 | 22               | 0                       | 0                 | 0                          | 0                          | 0                  | 0                  | 0              |
| 32                        | 380.00                                      | SERVICES                                   | 15               | 17,294,953              | 15,711,946        | 1,319,951                  | 214,285                    | 31,650             | 17,122             | 0              |
| 33                        | 380.00                                      | DIRECT - SERVICES                          | 15               | 49                      | 0                 | 0                          | 0                          | 0                  | 0                  | 49             |
| 34                        | 380.12                                      | CSL REPLACEMENT                            | 15               | 0                       | 0                 | 0                          | 0                          | 0                  | 0                  | 0              |
| 35                        | 381.00                                      | METERS                                     | 16               | 937,707                 | 705,840           | 151,027                    | 70,581                     | 7,924              | 2,213              | 122            |
| 36                        | 381.10                                      | AUTOMATIC METER READING                    | 16               | 1,297,423               | 976,609           | 208,963                    | 97,657                     | 10,963             | 3,062              | 169            |
| 37                        | 381.10                                      | AUTOMATIC METER READING - C&I NET ONLY     | 26               | 306,708                 | 0                 | 0                          | 62,538                     | 197,729            | 41,384             | 5,058          |
| 38                        | 382.00                                      | METER INSTALLATIONS                        | 16               | 825,547                 | 621,414           | 132,963                    | 62,139                     | 6,976              | 1,948              | 107            |
| 39                        | 383.00                                      | HOUSE REGULATORS                           | 21               | 298,012                 | 270,124           | 22,804                     | 4,476                      | 498                | 98                 | 12             |
| 40                        | 384.00                                      | HOUSE REG INSTALLATIONS                    | 21               | 37,255                  | 33,769            | 2,851                      | 560                        | 62                 | 12                 | 2              |
| 41                        | 385.00                                      | IND M&R EQUIPMENT                          | 17               | 437,919                 | 0                 | 11,789                     | 75,186                     | 153,403            | 197,541            | 0              |
| 42                        | 385.00                                      | DIRECT - IND M&R EQUIPMENT                 | 17               | 11,470                  | 0                 | 0                          | 0                          | 0                  | 0                  | 11,470         |
| 43                        | 385.10                                      | IND M&R EQUIPMENT - LG VOLUME              | 17               | 0                       | 0                 | 0                          | 0                          | 0                  | 0                  | 0              |
| 44                        | 387.10                                      | OTHER EQUIP DISTRIBUTION                   | 11               | 0                       | 0                 | 0                          | 0                          | 0                  | 0                  | 0              |
| 45                        | 387.20                                      | OTHER EQUIP ODORIZATION                    | 11               | 0                       | 0                 | 0                          | 0                          | 0                  | 0                  | 0              |
| 46                        | 387.42                                      | OTHER EQUIP RADIO                          | 11               | 0                       | 0                 | 0                          | 0                          | 0                  | 0                  | 0              |
| 47                        | 387.44                                      | OTHER EQUIP COMMUNICATION                  | 11               | 0                       | 0                 | 0                          | 0                          | 0                  | 0                  | 0              |
| 48                        | 387.46                                      | OTHER EQUIP CUSTOMER INFO SERVICE          | 11               | 394,500                 | 283,866           | 35,264                     | 29,528                     | 19,252             | 26,416             | 174            |
| 49                        | 387.45                                      | DIRECT - OTHER EQUIP CUSTOMER INFO SERVICE | 11               | 1,508                   | 0                 | 0                          | 0                          | 0                  | 0                  | 1,508          |
| 50                        | 387.50                                      | GPS EQUIPMENT                              | 11               | 241,930                 | 174,083           | 21,626                     | 18,109                     | 11,806             | 16,200             | 106            |
| 51                        | TOTAL DISTRIBUTION PLANT                    |                                            |                  | 65,443,818              | 47,474,141        | 5,810,049                  | 4,712,457                  | 3,228,686          | 4,180,702          | 37,782         |
| 53                        | 389-398                                     | GENERAL PLANT                              | 11               | 1,958,270               | 1,407,654         | 174,871                    | 146,427                    | 95,466             | 130,992            | 861            |
| 54                        | NET DEPRECIATION & AMORTIZATION EXPENSE     |                                            |                  | 72,557,195              | 52,598,586        | 6,458,450                  | 5,254,371                  | 3,566,612          | 4,637,945          | 41,231         |
| 55                        | AMORTIZATION OF NET NEGATIVE SALVAGE        |                                            |                  | 4,744,713               | 3,414,105         | 424,130                    | 355,142                    | 231,542            | 317,706            | 2,088          |
| 56                        | TOTAL AMORTIZATION AND DEPRECIATION EXPENSE |                                            |                  | 77,301,908              | 56,012,692        | 6,882,580                  | 5,609,512                  | 3,798,154          | 4,955,651          | 43,319         |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
OPERATING REVENUE @ PROPOSED & CURRENT RATES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

ALLOCATED COST OF SERVICE  
AVERAGE STUDY- ALLOCATORS 5 & 20

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

| LINE NO.                          | ACCT NO.<br>(A) | ACCOUNT TITLE<br>(B)             | ALLOC FACTOR<br>(C) | TOTAL COMPANY<br>(D)<br>\$ | RSS/RDS<br>(E)<br>\$ | SGSS1/SCD1/SGDS1<br>(F)<br>\$ | SGSS2/SCD2/SGDS2<br>(G)<br>\$ | SDS/LGSS<br>(H)<br>\$ | LDS/LGSS<br>(I)<br>\$ | MLDS<br>(J)<br>\$ |
|-----------------------------------|-----------------|----------------------------------|---------------------|----------------------------|----------------------|-------------------------------|-------------------------------|-----------------------|-----------------------|-------------------|
| <b>PROPOSED OPERATING REVENUE</b> |                 |                                  |                     |                            |                      |                               |                               |                       |                       |                   |
| SALES REVENUE                     |                 |                                  |                     |                            |                      |                               |                               |                       |                       |                   |
| 1                                 | 480/481         | SALES BASE REVENUE               |                     | 291,753,020                | 245,109,543          | 27,539,222                    | 16,933,808                    | 2,149,847             | 0                     | 20,600            |
| 2                                 |                 | C&I CHARGE REVENUE               |                     | 2,558,065                  | 0                    | 0                             | 521,588                       | 1,649,136             | 345,159               | 42,182            |
| 3                                 |                 | USP REVENUE                      |                     | 25,010,607                 | 25,010,607           | 0                             | 0                             | 0                     | 0                     | 0                 |
| 4                                 |                 | STAS REVENUE                     |                     | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 5                                 |                 | RIDER CC - CUSTOMER CHOICE       |                     | 33,856                     | 24,988               | 4,813                         | 4,055                         | 0                     | 0                     | 0                 |
| 6                                 |                 | GAS PROCUREMENT REVENUE          |                     | 2,581,692                  | 1,912,126            | 334,502                       | 281,823                       | 53,241                | 0                     | 0                 |
| 7                                 |                 | MERCHANT FUNCTION REVENUE        |                     | 1,216,174                  | 1,139,022            | 41,873                        | 35,279                        | 0                     | 0                     | 0                 |
| 8                                 |                 | GAS COST REVENUE                 |                     | 153,873,118                | 113,767,356          | 19,902,150                    | 16,767,888                    | 3,167,707             | 0                     | 268,017           |
| 9                                 |                 | TOTAL SALES REVENUE              |                     | 477,026,532                | 386,963,842          | 47,822,560                    | 34,544,441                    | 7,019,931             | 345,159               | 330,799           |
| TRANSPORTATION REVENUE            |                 |                                  |                     |                            |                      |                               |                               |                       |                       |                   |
| 10                                | 489.00          | TRANSPORTATION BASE REVENUE      |                     | 121,907,878                | 61,251,663           | 9,506,980                     | 18,930,761                    | 16,225,331            | 15,658,687            | 334,456           |
| 11                                |                 | USP REVENUE                      |                     | 6,931,233                  | 6,931,233            | 0                             | 0                             | 0                     | 0                     | 0                 |
| 12                                |                 | STAS REVENUE                     |                     | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 13                                |                 | RIDER CC - CUSTOMER CHOICE       |                     | 13,321                     | 6,925                | 1,643                         | 4,753                         | 0                     | 0                     | 0                 |
| 14                                |                 | FLEX REVENUE                     |                     | 5,079,975                  | 0                    | 2,678                         | 43,793                        | 163,647               | 4,020,861             | 848,996           |
| 15                                |                 | GAS COST REVENUE                 |                     | 9,633,818                  | 6,418,705            | 1,338,266                     | 1,878,847                     | 0                     | 0                     | 0                 |
| 16                                |                 | TOTAL TRANSPORTATION REVENUE     |                     | 143,566,225                | 74,606,526           | 10,849,567                    | 20,858,154                    | 16,388,978            | 19,679,548            | 1,183,452         |
| MISCELLANEOUS REVENUE             |                 |                                  |                     |                            |                      |                               |                               |                       |                       |                   |
| 17                                | 487.00          | FORFEITED DISCOUNTS              | 10                  | 1,347,840                  | 995,892              | 132,237                       | 125,080                       | 49,115                | 42,053                | 3,464             |
| 18                                | 488.00          | MISCELLANEOUS REVENUE            | 6                   | 105,936                    | 96,719               | 7,911                         | 1,176                         | 105                   | 22                    | 3                 |
| 19                                | 493.00          | RENTS                            | 11                  | 9,600                      | 6,908                | 858                           | 719                           | 469                   | 643                   | 4                 |
| 20                                | 495.00          | OTHER                            | 6                   | 229,068                    | 209,137              | 17,107                        | 2,543                         | 227                   | 48                    | 7                 |
| 21                                |                 | TOTAL MISCELLANEOUS REVENUE      |                     | 1,892,444                  | 1,308,655            | 158,113                       | 129,517                       | 49,916                | 42,786                | 3,478             |
| 22                                |                 | TOTAL PROPOSED OPERATING REVENUE |                     | 622,285,201                | 462,878,823          | 58,830,240                    | 55,532,112                    | 23,458,825            | 20,067,473            | 1,517,729         |
| <b>CURRENT OPERATING REVENUE</b>  |                 |                                  |                     |                            |                      |                               |                               |                       |                       |                   |
| SALES REVENUE                     |                 |                                  |                     |                            |                      |                               |                               |                       |                       |                   |
| 23                                | 480/481         | SALES BASE REVENUE               |                     | 243,138,783                | 199,086,099          | 25,773,774                    | 16,206,338                    | 2,051,972             | 0                     | 20,600            |
| 24                                |                 | USP REVENUE                      |                     | 22,946,588                 | 22,946,588           | 0                             | 0                             | 0                     | 0                     | 0                 |
| 25                                |                 | STAS REVENUE                     |                     | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 26                                |                 | RIDER CC - CUSTOMER CHOICE       |                     | 33,856                     | 24,988               | 4,813                         | 4,055                         | 0                     | 0                     | 0                 |
| 27                                |                 | GAS PROCUREMENT REVENUE          |                     | 2,581,692                  | 1,912,126            | 334,502                       | 281,823                       | 53,241                | 0                     | 0                 |
| 28                                |                 | MERCHANT FUNCTION REVENUE        |                     | 1,216,174                  | 1,139,022            | 41,873                        | 35,279                        | 0                     | 0                     | 0                 |
| 29                                |                 | GAS COST REVENUE                 |                     | 153,873,118                | 113,767,356          | 19,902,150                    | 16,767,888                    | 3,167,707             | 0                     | 268,017           |
| 30                                |                 | TOTAL SALES REVENUE              |                     | 423,790,211                | 338,876,179          | 46,057,112                    | 33,295,383                    | 5,272,920             | 0                     | 288,617           |
| TRANSPORTATION REVENUE            |                 |                                  |                     |                            |                      |                               |                               |                       |                       |                   |
| 31                                | 489.00          | TRANSPORTATION BASE REVENUE      |                     | 128,372,647                | 72,280,984           | 8,890,928                     | 18,020,338                    | 15,403,016            | 13,678,445            | 99,136            |
| 32                                |                 | USP REVENUE                      |                     | 6,359,228                  | 6,359,228            | 0                             | 0                             | 0                     | 0                     | 0                 |
| 33                                |                 | STAS REVENUE                     |                     | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 34                                |                 | RIDER CC - CUSTOMER CHOICE       |                     | 13,321                     | 6,925                | 1,643                         | 4,753                         | 0                     | 0                     | 0                 |
| 35                                |                 | FLEX REVENUE                     |                     | 5,587,970                  | 0                    | 3,443                         | 46,673                        | 232,778               | 4,220,760             | 1,084,316         |
| 36                                |                 | GAS COST REVENUE                 |                     | 9,633,818                  | 6,418,705            | 1,338,266                     | 1,878,847                     | 0                     | 0                     | 0                 |
| 37                                |                 | TOTAL TRANSPORTATION REVENUE     |                     | 149,987,184                | 85,063,842           | 10,234,280                    | 19,950,811                    | 15,635,794            | 17,899,205            | 1,183,452         |
| MISCELLANEOUS REVENUE             |                 |                                  |                     |                            |                      |                               |                               |                       |                       |                   |
| 38                                | 487.00          | FORFEITED DISCOUNTS              | 10                  | 1,246,120                  | 920,733              | 122,257                       | 115,640                       | 45,409                | 38,879                | 3,203             |
| 39                                | 488.00          | MISCELLANEOUS REVENUE            | 6                   | 105,936                    | 96,719               | 7,911                         | 1,176                         | 105                   | 22                    | 3                 |
| 40                                | 493.00          | RENTS                            | 11                  | 9,600                      | 6,908                | 858                           | 719                           | 469                   | 643                   | 4                 |
| 41                                | 495.00          | OTHER                            | 6                   | 229,068                    | 209,137              | 17,107                        | 2,543                         | 227                   | 48                    | 7                 |
| 42                                |                 | TOTAL MISCELLANEOUS REVENUE      |                     | 1,590,724                  | 1,233,497            | 148,133                       | 120,077                       | 46,209                | 39,592                | 3,217             |
| 43                                |                 | TOTAL CURRENT OPERATING REVENUE  |                     | 575,348,119                | 425,173,518          | 56,439,525                    | 53,366,071                    | 20,954,923            | 17,938,797            | 1,475,286         |



COLUMBIA GAS OF PENNSYLVANIA, INC.  
PRODUCTION & DISTRIBUTION O&M EXPENSES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

ALLOCATED COST OF SERVICE  
AVERAGE STUDY- ALLOCATORS 5 & 20

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

| LINE NO.                                        | ACCT NO.<br>(A) | ACCOUNT TITLE<br>(B)                   | ALLOC FACTOR<br>(C) | TOTAL COMPANY<br>(D)<br>\$ | RSS/RDS<br>(E)<br>\$ | SGSS1/SCD1/SGDS1<br>(F)<br>\$ | SGSS2/SCD2/SGDS2<br>(G)<br>\$ | SDS/LGSS<br>(H)<br>\$ | LDS/LGSS<br>(I)<br>\$ | MLDS<br>(J)<br>\$ |
|-------------------------------------------------|-----------------|----------------------------------------|---------------------|----------------------------|----------------------|-------------------------------|-------------------------------|-----------------------|-----------------------|-------------------|
| <u>PURCHASED GAS EXPENSES</u>                   |                 |                                        |                     |                            |                      |                               |                               |                       |                       |                   |
| 1                                               |                 | GAS PURCHASED COST                     |                     | 163,506,936                | 120,184,061          | 21,240,416                    | 18,646,735                    | 3,167,707             | 0                     | 268,017           |
| 2                                               | 807.00          | PURCHASED GAS EXPENSE                  | 4                   | (1,551,614)                | (1,140,498)          | (201,570)                     | (176,946)                     | (30,055)              | 0                     | (2,545)           |
| 3                                               | 807.00          | GAS PROCUREMENT EXPENSE                | 4                   | <u>2,581,692</u>           | <u>1,897,647</u>     | <u>335,388</u>                | <u>294,416</u>                | <u>50,007</u>         | <u>0</u>              | <u>4,234</u>      |
| 4                                               |                 | TOTAL PURCHASED GAS                    |                     | <u>164,537,014</u>         | <u>120,941,210</u>   | <u>21,374,233</u>             | <u>18,764,205</u>             | <u>3,187,660</u>      | <u>0</u>              | <u>269,706</u>    |
| <u>UNDERGROUND STORAGE OPERATIONS EXPENSES</u>  |                 |                                        |                     |                            |                      |                               |                               |                       |                       |                   |
| 5                                               | 816.00          | WELLS                                  | 25                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 6                                               | 817.00          | LINES                                  | 25                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 7                                               | 818.00          | COMPRESSOR STATION                     | 25                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 8                                               | 820.00          | M & R                                  | 25                  | 124,072                    | 91,867               | 16,552                        | 13,416                        | 2,044                 | 0                     | 194               |
| 9                                               | 821.00          | PURIFICATION                           | 25                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 10                                              | 823.00          | GAS LOSSES                             | 25                  | 1,322                      | 979                  | 176                           | 143                           | 22                    | 0                     | 2                 |
| 11                                              | 825.00          | STORAGE WELL ROYALTIES                 | 25                  | <u>5,199</u>               | <u>3,850</u>         | <u>694</u>                    | <u>562</u>                    | <u>86</u>             | <u>0</u>              | <u>8</u>          |
| 12                                              |                 | TOTAL UNDERGROUND STORAGE OPERATIONS   |                     | <u>130,593</u>             | <u>96,695</u>        | <u>17,422</u>                 | <u>14,121</u>                 | <u>2,151</u>          | <u>0</u>              | <u>204</u>        |
| <u>UNDERGROUND STORAGE MAINTENANCE EXPENSES</u> |                 |                                        |                     |                            |                      |                               |                               |                       |                       |                   |
| 13                                              | 832.00          | WELLS                                  | 25                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 14                                              | 834.00          | COMPRESSOR STATION                     | 25                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 15                                              | 836.00          | PURIFICATION                           | 25                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 16                                              | 840.00          | OTHER STORAGE - OPERATION SUPERV - ENG | 25                  | <u>0</u>                   | <u>0</u>             | <u>0</u>                      | <u>0</u>                      | <u>0</u>              | <u>0</u>              | <u>0</u>          |
| 16                                              |                 | TOTAL UNDERGROUND STORAGE MAINTENANCE  |                     | <u>0</u>                   | <u>0</u>             | <u>0</u>                      | <u>0</u>                      | <u>0</u>              | <u>0</u>              | <u>0</u>          |
| 17                                              |                 | TOTAL UNDERGROUND STORAGE              |                     | <u>130,593</u>             | <u>96,695</u>        | <u>17,422</u>                 | <u>14,121</u>                 | <u>2,151</u>          | <u>0</u>              | <u>204</u>        |
| <u>DISTRIBUTION OPERATIONS EXPENSES</u>         |                 |                                        |                     |                            |                      |                               |                               |                       |                       |                   |
| 18                                              | 870.00          | SUPERVISION & ENGINEERING              | 18                  | 8,084,222                  | 6,111,349            | 711,412                       | 503,809                       | 321,510               | 435,335               | 808               |
| 19                                              | 871.00          | LOAD DISPATCHING                       | 13                  | 160,895                    | 106,400              | 14,489                        | 15,172                        | 10,381                | 14,428                | 26                |
| 20                                              | 874.00          | MAINS & SERVICES                       | 14                  | 18,342,149                 | 13,250,185           | 1,589,347                     | 1,358,420                     | 899,316               | 1,242,681             | 2,201             |
| 21                                              | 875.00          | M & R - GENERAL                        | 13                  | 535,041                    | 353,823              | 48,180                        | 50,454                        | 34,521                | 47,977                | 86                |
| 22                                              | 876.00          | M & R - INDUSTRIAL                     | 17                  | 282,622                    | (0)                  | 7,608                         | 48,523                        | 99,003                | 127,488               | 0                 |
| 23                                              | 878.00          | METERS & HOUSE REGULATORS              | 23                  | 2,617,608                  | 2,027,966            | 389,893                       | 174,437                       | 19,580                | 5,418                 | 314               |
| 24                                              | 879.00          | CUSTOMER INSTALLATIONS                 | 15                  | 6,830,672                  | 6,205,461            | 521,317                       | 84,632                        | 12,500                | 6,762                 | 0                 |
| 25                                              | 880.00          | OTHER                                  | 18                  | 3,800,938                  | 2,873,357            | 334,483                       | 236,875                       | 151,163               | 204,681               | 380               |
| 26                                              | 881.00          | RENTS                                  | 18                  | <u>(27,695)</u>            | <u>(20,936)</u>      | <u>(2,437)</u>                | <u>(1,726)</u>                | <u>(1,101)</u>        | <u>(1,491)</u>        | <u>(3)</u>        |
| 27                                              |                 | TOTAL DISTRIBUTION OPERATIONS          |                     | <u>40,626,452</u>          | <u>30,907,603</u>    | <u>3,614,291</u>              | <u>2,470,596</u>              | <u>1,546,871</u>      | <u>2,083,279</u>      | <u>3,812</u>      |
| <u>DISTRIBUTION MAINTENANCE EXPENSES</u>        |                 |                                        |                     |                            |                      |                               |                               |                       |                       |                   |
| 28                                              | 885.00          | SUPERVISION & ENGINEERING              | 18                  | 138,648                    | 104,812              | 12,201                        | 8,641                         | 5,514                 | 7,466                 | 14                |
| 29                                              | 886.00          | STRUCTURES AND IMPROVEMENTS            | 13                  | 166,985                    | 110,427              | 15,037                        | 15,747                        | 10,774                | 14,974                | 27                |
| 30                                              | 887.00          | MAINS                                  | 13                  | 11,917,466                 | 7,881,020            | 1,073,168                     | 1,123,817                     | 768,915               | 1,068,639             | 1,907             |
| 31                                              | 889.00          | M & R - GENERAL                        | 13                  | 912,321                    | 603,318              | 82,155                        | 86,032                        | 58,863                | 81,808                | 146               |
| 32                                              | 890.00          | M & R - INDUSTRIAL                     | 17                  | 150,902                    | 0                    | 4,062                         | 25,908                        | 52,861                | 68,070                | 0                 |
| 33                                              | 892.00          | SERVICES                               | 15                  | 7,471,330                  | 6,787,479            | 570,212                       | 92,570                        | 13,673                | 7,397                 | 0                 |
| 34                                              | 893.00          | METERS & HOUSE REGULATORS              | 23                  | 505,241                    | 391,431              | 75,256                        | 33,669                        | 3,779                 | 1,046                 | 61                |
| 35                                              | 894.00          | OTHER EQUIPMENT                        | 18                  | <u>963,782</u>             | <u>728,581</u>       | <u>84,813</u>                 | <u>60,063</u>                 | <u>38,330</u>         | <u>51,900</u>         | <u>96</u>         |
| 36                                              |                 | TOTAL DISTRIBUTION MAINTENANCE         |                     | <u>22,226,675</u>          | <u>16,607,068</u>    | <u>1,916,903</u>              | <u>1,446,447</u>              | <u>952,708</u>        | <u>1,301,299</u>      | <u>2,250</u>      |
| 37                                              |                 | TOTAL DISTRIBUTION                     |                     | <u>62,853,127</u>          | <u>47,514,671</u>    | <u>5,531,194</u>              | <u>3,917,043</u>              | <u>2,499,579</u>      | <u>3,384,578</u>      | <u>6,063</u>      |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
OTHER O&M EXPENSES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

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            | 686,852            | 627,089            | 51,294            | 7,624             | 680              | 144              | 21             |
| 3                                              | 903.00   | CUSTOMER RECORDS AND COLLECTION EXPENSES     | 6            | 7,794,148          | 7,115,979          | 582,067           | 86,515            | 7,716            | 1,637            | 234            |
| 4                                              | 903.00   | INTEREST ON CUSTOMER DEPOSITS                | 9            | 108,514            | 79,468             | 27,088            | 1,958             | 0                | 0                | 0              |
| 5                                              | 904.00   | UNCOLLECTIBLES-DIS REVENUE                   | 7            | 4,410,259          | 4,257,355          | 82,428            | 70,476            | 0                | 0                | 0              |
| 6                                              | 904.00   | UNCOLLECTIBLES-GMB/GTS REVENUE               | 8            | 323,417            | (3)                | 3,131             | 14,897            | 145,554          | 147,692          | 12,148         |
| 7                                              | 904.00   | UNCOLLECTIBLES-UNBUNDLED GAS                 | Direct       | 1,216,174          | 1,139,022          | 41,873            | 35,279            | 0                | 0                | 0              |
| 8                                              | 904.00   | DIRECT USP UNCOLLECTIBLES                    |              | 29,305,816         | 29,305,816         | 0                 | 0                 | 0                | 0                | 0              |
| 9                                              | 905.00   | MISCELLANEOUS                                | 6            | 3,951              | 3,607              | 295               | 44                | 4                | 1                | 0              |
| 10                                             | 921.00   | OFFICE SUPPLIES & EXPENSES                   | 6            | 0                  | 0                  | 0                 | 0                 | 0                | 0                | 0              |
| 11                                             |          | TOTAL CUSTOMER ACCOUNTS                      |              | <u>43,849,131</u>  | <u>42,528,334</u>  | <u>788,176</u>    | <u>216,792</u>    | <u>153,954</u>   | <u>149,473</u>   | <u>12,402</u>  |
| <u>CUST SERVICE &amp; INFORMATION EXPENSES</u> |          |                                              |              |                    |                    |                   |                   |                  |                  |                |
| 12                                             | 907.00   | SUPERVISION                                  | 6            | 0                  | 0                  | 0                 | 0                 | 0                | 0                | 0              |
| 13                                             | 908.00   | CUSTOMER ASSISTANCE                          | 6            | 20,892             | 19,075             | 1,560             | 232               | 21               | 4                | 0              |
| 14                                             | 909.00   | INFORMATIONAL & INSTRUCTIONAL EXPENSES       | 6            | 203,522            | 185,819            | 15,199            | 2,259             | 202              | 43               | 1              |
| 15                                             | 910.00   | MISCELLANEOUS                                | 6            | 1,024,093          | 935,015            | 76,479            | 11,367            | 1,014            | 215              | 2              |
| 16                                             | 921.00   | OFFICE SUPPLIES & EXPENSES                   | 6            | 0                  | (3)                | 0                 | 0                 | 0                | 0                | 3              |
| 17                                             | 931.00   | RENTS - GENERAL                              | 6            | 0                  | 0                  | 0                 | 0                 | 0                | 0                | 0              |
| 18                                             | 932.00   | MAINTENANCE                                  | 6            | 0                  | 0                  | 0                 | 0                 | 0                | 0                | 0              |
| 19                                             |          | TOTAL CUST SERVICE & INFORMATION             |              | <u>1,248,507</u>   | <u>1,139,906</u>   | <u>93,239</u>     | <u>13,858</u>     | <u>1,236</u>     | <u>262</u>       | <u>6</u>       |
| <u>SALES EXPENSES</u>                          |          |                                              |              |                    |                    |                   |                   |                  |                  |                |
| 20                                             | 912.00   | DEMONSTRATION                                | 6            | 605,075            | 552,427            | 45,187            | 6,716             | 599              | 127              | 18             |
| 21                                             | 913.00   | ADVERTISING                                  | 6            | <u>274,671</u>     | <u>250,772</u>     | <u>20,512</u>     | <u>3,049</u>      | <u>272</u>       | <u>58</u>        | <u>8</u>       |
| 22                                             |          | TOTAL SALES                                  |              | <u>879,746</u>     | <u>803,199</u>     | <u>65,699</u>     | <u>9,765</u>      | <u>871</u>       | <u>185</u>       | <u>26</u>      |
| <u>ADMINISTRATIVE AND GENERAL EXPENSES</u>     |          |                                              |              |                    |                    |                   |                   |                  |                  |                |
| 23                                             | 920.00   | SALARIES                                     | 19           | 24,103,497         | 18,750,351         | 2,097,004         | 1,344,493         | 816,627          | 1,092,371        | 2,651          |
| 24                                             | 920.00   | SALARIES - C&I NETWORK ONLY                  | 26           | 102,933            | 0                  | 0                 | 20,988            | 66,359           | 13,889           | 1,697          |
| 25                                             | 921.00   | OFFICE SUPPLIES & EXPENSES                   | 19           | (1,524,783)        | (1,186,144)        | (132,656)         | (85,052)          | (51,660)         | (69,103)         | (168)          |
| 26                                             | 922.00   | ADMIN. EXPENSE TRANSFERRED                   | 19           | 0                  | 0                  | 0                 | 0                 | 0                | 0                | 0              |
| 25                                             | 923.00   | OUTSIDE SERVICES EMPLOYED                    | 19           | 25,906,451         | 20,152,887         | 2,253,861         | 1,445,062         | 877,711          | 1,174,080        | 2,850          |
| 26                                             | 923.00   | OUTSIDE SERVICES EMPLOYED - C&I NETWORK ONLY | 26           | 1,183,511          | 0                  | 0                 | 241,318           | 762,986          | 159,691          | 19,516         |
| 27                                             | 924.00   | PROPERTY INSURANCE                           | 19           | 55,948             | 43,522             | 4,868             | 3,121             | 1,896            | 2,536            | 6              |
| 28                                             | 925.00   | INJURIES AND DAMAGES                         | 19           | 4,073,358          | 3,168,706          | 354,382           | 227,212           | 138,005          | 184,605          | 448            |
| 29                                             | 926.00   | EMPLOYEE PENSIONS & BENEFITS                 | 24           | 15,645,986         | 11,981,540         | 1,388,425         | 927,651           | 575,146          | 771,660          | 1,565          |
| 30                                             | 928.00   | REGULATORY COMMISSION EXPENSES               | 19           | 2,418,231          | 1,881,166          | 210,386           | 134,889           | 81,930           | 109,594          | 266            |
| 31                                             | 930.00   | MISCELLANEOUS GENERAL                        | 19           | 637,529            | 495,940            | 55,465            | 35,561            | 21,600           | 28,893           | 70             |
| 32                                             | 931.00   | RENTS-GENERAL                                | 19           | 5,954,736          | 4,632,249          | 518,062           | 332,155           | 201,747          | 269,869          | 655            |
| 33                                             | 932.00   | MAINTENANCE                                  | 19           | <u>2,468,677</u>   | <u>1,920,409</u>   | <u>214,775</u>    | <u>137,703</u>    | <u>83,639</u>    | <u>111,880</u>   | <u>272</u>     |
| 34                                             |          | TOTAL ADMINISTRATIVE & GENERAL               |              | <u>81,026,074</u>  | <u>61,840,626</u>  | <u>6,964,572</u>  | <u>4,765,100</u>  | <u>3,575,984</u> | <u>3,849,964</u> | <u>29,829</u>  |
| 35                                             |          | TOTAL O & M EXPENSES                         |              | <u>354,524,192</u> | <u>274,864,641</u> | <u>34,834,535</u> | <u>27,700,885</u> | <u>9,421,435</u> | <u>7,384,462</u> | <u>318,236</u> |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
TAXES OTHER THAN INCOME TAXES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

ALLOCATED COST OF SERVICE  
AVERAGE STUDY- ALLOCATORS 5 & 20

111, SCHEDULE 3  
PAGE 9 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>FEDERAL TAXES</u>          |              | \$               | \$               | \$               | \$               | \$             | \$             | \$         |
| 1        | 408.00   | FEDERAL/STATE UNEMPLOYMENT    | 24           | 137,971          | 105,657          | 12,244           | 8,180            | 5,072          | 6,805          | 14         |
| 2        | 408.00   | FICA                          | 24           | <u>2,598,027</u> | <u>1,989,543</u> | <u>230,549</u>   | <u>154,037</u>   | <u>95,504</u>  | <u>128,135</u> | <u>260</u> |
| 3        |          | TOTAL FEDERAL TAXES           |              | <u>2,735,998</u> | <u>2,095,200</u> | <u>242,792</u>   | <u>162,217</u>   | <u>100,575</u> | <u>134,939</u> | <u>274</u> |
|          |          | <u>STATE TAXES</u>            |              |                  |                  |                  |                  |                |                |            |
| 4        | 408.00   | PA PROPERTY TAXES             | 11           | 435,885          | 313,645          | 38,964           | 32,626           | 21,271         | 29,187         | 192        |
| 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           | 275              | 198              | 25               | 21               | 13             | 18             | 0          |
| 8        | 408.00   | STATE SALES AND USE TAX       | 19           | 284,465          | 221,288          | 24,749           | 15,868           | 9,638          | 12,892         | 31         |
| 9        | 408.00   | OTHER                         | 19           | <u>180</u>       | <u>140</u>       | <u>16</u>        | <u>10</u>        | <u>6</u>       | <u>8</u>       | <u>0</u>   |
| 10       |          | TOTAL STATE TAXES             |              | <u>720,805</u>   | <u>535,271</u>   | <u>63,753</u>    | <u>48,524</u>    | <u>30,928</u>  | <u>42,106</u>  | <u>223</u> |
| 11       |          | TOTAL TAXES OTHER THAN INCOME |              | <u>3,456,803</u> | <u>2,630,471</u> | <u>306,545</u>   | <u>210,741</u>   | <u>131,504</u> | <u>177,045</u> | <u>497</u> |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
RATE BASE  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

ALLOCATED COST OF SERVICE  
AVERAGE STUDY- ALLOCATORS 5 & 20

111, SCHEDULE 3

PAGE 10 OF 13

WITNESS: M. P. BALMERT

| LINE NO.                     | ACCT NO.<br>(A) | ACCOUNT TITLE<br>(B)                      | ALLOC FACTOR<br>(C) | TOTAL COMPANY<br>(D)<br>\$ | RSS/RDS<br>(E)<br>\$ | SGSS1/SCD1/SGDS1<br>(F)<br>\$ | SGSS2/SCD2/SGDS2<br>(G)<br>\$ | SDS/LGSS<br>(H)<br>\$ | LDS/LGSS<br>(I)<br>\$ | MLDS<br>(J)<br>\$ |
|------------------------------|-----------------|-------------------------------------------|---------------------|----------------------------|----------------------|-------------------------------|-------------------------------|-----------------------|-----------------------|-------------------|
| 1                            | 101-107         | GROSS PLANT [PAGE 3]                      |                     | 2,741,791,737              | 1,969,659,474        | 244,925,462                   | 206,008,283                   | 136,345,327           | 183,514,335           | 1,338,856         |
| 2                            | 117.00          | GAS STORED UNDERGROUND - NON CURRENT      | 25                  | 3,794,693                  | 2,809,704            | 506,250                       | 410,320                       | 62,499                | 0                     | 5,920             |
| 3                            | 108-111         | DEPRECIATION RESERVE [PAGE 4]             |                     | (499,229,725)              | (369,768,247)        | (46,090,475)                  | (34,084,367)                  | (20,876,758)          | (28,050,150)          | (359,729)         |
| 4                            | 117.00          | GAS LOST-UNDERGROUND STORAGE              | 25                  | (163,467)                  | (121,036)            | (21,808)                      | (17,676)                      | (2,692)               | 0                     | (255)             |
| 5                            |                 | NET PLANT                                 |                     | 2,246,193,238              | 1,602,579,896        | 199,319,429                   | 172,316,560                   | 115,528,376           | 155,464,185           | 984,792           |
| <u>WORKING CAPITAL</u>       |                 |                                           |                     |                            |                      |                               |                               |                       |                       |                   |
| 6                            | 154.00          | MATERIALS & SUPPLIES                      | 11                  | 851,388                    | 612,625              | 76,106                        | 63,726                        | 41,548                | 57,009                | 375               |
| 7                            | 164.00          | GAS STORED UNDERGROUND - FSS              | 25                  | 50,432,424                 | 37,341,679           | 6,728,190                     | 5,453,258                     | 830,622               | 0                     | 78,675            |
| 8                            | 165.00          | PREPAYMENTS                               | 19                  | 2,338,584                  | 1,819,208            | 203,457                       | 130,446                       | 79,231                | 105,985               | 257               |
| 9                            | 165.00          | CLOUD BASED ASSETS                        | 11                  | 748,422                    | 538,536              | 66,901                        | 56,019                        | 36,523                | 50,114                | 329               |
| 10                           |                 | CASH WORKING CAPITAL - GAS PURCHASES      | 4                   | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 11                           |                 | CASH WORKING CAPITAL - ALL OTHER          | 19                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 12                           |                 | TOTAL WORKING CAPITAL                     |                     | 54,370,818                 | 40,312,048           | 7,074,654                     | 5,703,449                     | 987,924               | 213,108               | 79,636            |
| <u>DEFERRED INCOME TAXES</u> |                 |                                           |                     |                            |                      |                               |                               |                       |                       |                   |
| 13                           | 190.00          | ACCUMULATED DEF INCOME TAX                | 12                  | 79,055,237                 | 56,887,358           | 7,073,863                     | 5,922,818                     | 3,852,362             | 5,282,471             | 36,365            |
| 14                           | 282.00          | ACCUMULATED DEF INCOME TAX                | 12                  | (460,523,471)              | (331,388,085)        | (41,207,640)                  | (34,502,418)                  | (22,441,309)          | (30,772,178)          | (211,841)         |
| 15                           | 282.00          | ACCUMULATED DEF INCOME TAX - C&I NET ONLY | 26                  | (263,690)                  | 0                    | 0                             | (53,766)                      | (169,996)             | (35,580)              | (4,348)           |
| 16                           | 283.00          | ACCUMULATED DEF INCOME TAX                | 12                  | 0                          | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 17                           |                 | TOTAL DEFERRED INCOME TAXES               |                     | (381,731,924)              | (274,500,727)        | (34,133,778)                  | (28,633,366)                  | (18,758,943)          | (25,525,287)          | (179,824)         |
| 18                           | 235.00          | CUSTOMER DEPOSITS                         | 9                   | (2,838,227)                | (2,078,519)          | (708,507)                     | (51,202)                      | 0                     | 0                     | 0                 |
| 19                           | 252.00          | CUSTOMER ADVANCES                         | 22                  | 2,552                      | 1,688                | 230                           | 241                           | 165                   | 229                   | 0                 |
| 20                           |                 | RATE BASE                                 |                     | 1,915,996,457              | 1,366,314,386        | 171,552,028                   | 149,335,682                   | 97,757,522            | 130,152,235           | 884,604           |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
STATE/FEDERAL INCOME TAXES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

ALLOCATED COST OF SERVICE  
AVERAGE STUDY- ALLOCATORS 5 & 20

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

| LINE<br>NO.               | ACCT<br>NO.<br>(A)                            | ALLOC<br>FACTOR<br>(B) | TOTAL<br>COMPANY<br>(C)<br>\$ | RSS/RDS<br>(D)<br>\$ | SGSS1/SCD1/SGDS1<br>(E)<br>\$ | SGSS2/SCD2/SGDS2<br>(F)<br>\$ | SDS/LGSS<br>(G)<br>\$ | LDS/LGSS<br>(H)<br>\$ | MLDS<br>(I)<br>\$ |
|---------------------------|-----------------------------------------------|------------------------|-------------------------------|----------------------|-------------------------------|-------------------------------|-----------------------|-----------------------|-------------------|
| <u>STATE INCOME TAX</u>   |                                               |                        |                               |                      |                               |                               |                       |                       |                   |
| 1                         | OPERATING INCOME BEFORE TAXES (PG. 2, LINE 8) |                        | 140,065,217                   | 91,665,715           | 14,415,865                    | 19,844,933                    | 7,603,831             | 5,421,640             | 1,113,235         |
| 2                         | STATUTORY ADJUSTMENTS                         | 12                     | (80,890,686)                  | (58,208,129)         | (7,238,099)                   | (6,060,330)                   | (3,941,803)           | (5,405,116)           | (37,210)          |
| 3                         | INTEREST ON DEBT                              |                        | (45,409,116)                  | (32,381,651)         | (4,065,783)                   | (3,539,256)                   | (2,316,853)           | (3,084,608)           | (20,965)          |
| 4                         | PA BONUS DEPRECIATION ADJUSTMENT              | 12                     | <u>(12,561,349)</u>           | <u>(9,039,021)</u>   | <u>(1,123,990)</u>            | <u>(941,096)</u>              | <u>(612,115)</u>      | <u>(839,349)</u>      | <u>(5,778)</u>    |
| 5                         | STATE TAXABLE INCOME                          |                        | 1,204,066                     | (7,963,086)          | 1,987,994                     | 9,304,251                     | 733,060               | (3,907,433)           | 1,049,282         |
| 6                         | NET OPERATING LOSS DEDUCTION                  | 12                     | <u>(481,626)</u>              | <u>(346,573)</u>     | <u>(43,096)</u>               | <u>(36,083)</u>               | <u>(23,470)</u>       | <u>(32,182)</u>       | <u>(222)</u>      |
|                           | STATE TAXABLE INCOME                          |                        | 722,440                       | (8,309,660)          | 1,944,898                     | 9,268,167                     | 709,590               | (3,939,616)           | 1,049,060         |
| 7                         | STATE NET INCOME TAX @ 9.99%                  |                        | 72,172                        | (830,135)            | 194,295                       | 925,890                       | 70,888                | (393,568)             | 104,801           |
| 8                         | DEFERRED INCOME TAXES                         | 12                     | <u>10,162</u>                 | <u>7,313</u>         | <u>909</u>                    | <u>761</u>                    | <u>495</u>            | <u>679</u>            | <u>5</u>          |
| 9                         | STATE INCOME TAX                              |                        | 82,334                        | (822,823)            | 195,205                       | 926,651                       | 71,383                | (392,889)             | 104,806           |
| <u>FEDERAL INCOME TAX</u> |                                               |                        |                               |                      |                               |                               |                       |                       |                   |
| 10                        | OPERATING INCOME BEFORE TAXES (PG. 2, LINE 8) |                        | 140,065,217                   | 91,665,715           | 14,415,865                    | 19,844,933                    | 7,603,831             | 5,421,640             | 1,113,235         |
| 11                        | STATE NET INCOME TAX (LINE 7)                 |                        | (72,172)                      | 830,135              | (194,295)                     | (925,890)                     | (70,888)              | 393,568               | (104,801)         |
| 12                        | STATUTORY ADJUSTMENTS (LINES 2 & 3)           | 12                     | <u>(126,299,802)</u>          | <u>(90,589,780)</u>  | <u>(11,303,882)</u>           | <u>(9,599,586)</u>            | <u>(6,258,656)</u>    | <u>(8,489,724)</u>    | <u>(58,175)</u>   |
| 13                        | FEDERAL TAXABLE INCOME                        |                        | 13,693,243                    | 1,906,070            | 2,917,688                     | 9,319,457                     | 1,274,286             | (2,674,516)           | 950,259           |
| 14                        | FEDERAL INCOME TAX @ 21%                      |                        | 2,875,581                     | 400,275              | 612,714                       | 1,957,086                     | 267,600               | (561,648)             | 199,554           |
| 15                        | DEFERRED INCOME TAXES                         | 12                     | 18,403,387                    | 13,242,893           | 1,646,735                     | 1,378,782                     | 896,797               | 1,229,714             | 8,466             |
| 16                        | TAX REFUND AMORTIZATION                       | 12                     | 0                             | 0                    | 0                             | 0                             | 0                     | 0                     | 0                 |
| 17                        | FLOW BACK OF EXCESS DEFERRED TAXES            | 12                     | (1,747,266)                   | (1,257,315)          | (156,345)                     | (130,905)                     | (85,144)              | (116,752)             | (804)             |
| 18                        | EFFECT OF CNIT DEFERRED TAX ON FIT            | 12                     | <u>(2,134)</u>                | <u>(1,536)</u>       | <u>(191)</u>                  | <u>(160)</u>                  | <u>(104)</u>          | <u>(143)</u>          | <u>(1)</u>        |
| 19                        | FEDERAL INCOME TAX                            |                        | 19,529,568                    | 12,384,317           | 2,102,913                     | 3,204,803                     | 1,079,149             | 551,171               | 207,215           |
| 20                        | STATE NET INCOME TAX (LINE 9)                 |                        | 82,334                        | (822,823)            | 195,205                       | 926,651                       | 71,383                | (392,889)             | 104,806           |
| 21                        | TOTAL INCOME TAXES                            |                        | <u>19,611,902</u>             | <u>11,561,495</u>    | <u>2,298,118</u>              | <u>4,131,454</u>              | <u>1,150,532</u>      | <u>158,282</u>        | <u>312,021</u>    |

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**ALLOCATION FACTORS**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019**

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

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

| <u>LINE NO.</u> | <u>DESCRIPTION</u><br><u>(A)</u>             | <u>ALLOC FACTOR</u><br><u>(B)</u> | <u>TOTAL COMPANY</u><br><u>(C)</u> | <u>RSS/RDS</u><br><u>(D)</u> | <u>SGSS1/SCD1/SGDS1</u><br><u>(E)</u> | <u>SGSS2/SCD2/SGDS2</u><br><u>(F)</u> | <u>SDS/LGSS</u><br><u>(G)</u> | <u>LDS/LGSS</u><br><u>(H)</u> | <u>MLDS</u><br><u>(I)</u> |
|-----------------|----------------------------------------------|-----------------------------------|------------------------------------|------------------------------|---------------------------------------|---------------------------------------|-------------------------------|-------------------------------|---------------------------|
| 1               | DESIGN DAY                                   | 1                                 | 791,440,000                        | 447,700,000                  | 78,600,000                            | 102,800,000                           | 65,142,000                    | 97,198,000                    | 0                         |
| 2               | PERCENT                                      |                                   | 100.000%                           | 56.568%                      | 9.931%                                | 12.989%                               | 8.231%                        | 12.281%                       | 0.000%                    |
| 3               | THROUGHPUT EXCLUDING TRANSPORTATION          | 2                                 | 37,219,347                         | 27,512,601                   | 4,812,979                             | 4,055,014                             | 766,053                       | 0                             | 72,700                    |
| 4               | PERCENT                                      |                                   | 100.000%                           | 73.921%                      | 12.931%                               | 10.895%                               | 2.058%                        | 0.000%                        | 0.195%                    |
| 5               | THROUGHPUT EXCLUDING MDS                     | 3                                 | 77,383,630                         | 34,437,601                   | 6,456,921                             | 8,835,480                             | 7,001,685                     | 20,651,944                    | 0                         |
| 6               | PERCENT                                      |                                   | 100.000%                           | 44.502%                      | 8.344%                                | 11.418%                               | 9.048%                        | 26.688%                       | 0.000%                    |
| 7               | GAS PURCHASED EXPENSE                        | 4                                 | 163,506,936                        | 120,184,061                  | 21,240,416                            | 18,646,735                            | 3,167,707                     | 0                             | 268,017                   |
| 8               | PERCENT                                      |                                   | 100.000%                           | 73.504%                      | 12.991%                               | 11.404%                               | 1.937%                        | 0.000%                        | 0.164%                    |
| 9               | PEAK & AVERAGE MAINS                         | 5                                 |                                    |                              |                                       |                                       |                               |                               |                           |
| 10              | PERCENT                                      |                                   | 100.000%                           | 56.162%                      | 9.262%                                | 11.856%                               | 8.042%                        | 14.678%                       | 0.000%                    |
| 11              | AVERAGE NO. OF CUSTOMERS                     | 6                                 | 434,281                            | 396,498                      | 32,433                                | 4,819                                 | 430                           | 90                            | 11                        |
| 12              | PERCENT                                      |                                   | 100.000%                           | 91.299%                      | 7.468%                                | 1.110%                                | 0.099%                        | 0.021%                        | 0.003%                    |
| 13              | DISTRIBUTION UNCOLLECTIBLES                  | 7                                 | 8,970,092                          | 8,659,104                    | 167,619                               | 143,369                               | 0                             | 0                             | 0                         |
| 14              | PERCENT                                      |                                   | 100.000%                           | 96.533%                      | 1.869%                                | 1.598%                                | 0.000%                        | 0.000%                        | 0.000%                    |
| 15              | CURRENT GMB/GTS REVENUE                      | 8                                 | 39,195,616                         | 0                            | 379,333                               | 1,805,184                             | 17,639,825                    | 17,899,205                    | 1,472,069                 |
| 16              | PERCENT                                      |                                   | 100.001%                           | 0.000%                       | 0.968%                                | 4.606%                                | 45.005%                       | 45.666%                       | 3.756%                    |
| 17              | CUSTOMER DEPOSITS                            | 9                                 | 2,227,377                          | 1,631,178                    | 556,015                               | 40,184                                | 0                             | 0                             | 0                         |
| 18              | PERCENT                                      |                                   | 100.000%                           | 73.233%                      | 24.963%                               | 1.804%                                | 0.000%                        | 0.000%                        | 0.000%                    |
| 19              | FORFEITED DISCOUNTS                          | 10                                | 1,192,278                          | 880,955                      | 116,974                               | 110,646                               | 43,449                        | 37,195                        | 3,059                     |
| 20              | PERCENT                                      |                                   | 100.000%                           | 73.888%                      | 9.811%                                | 9.280%                                | 3.644%                        | 3.120%                        | 0.257%                    |
| 21              | DIST. PLANT EXCL ACCTS 375.70, 375.71, & 387 | 11                                | 2,632,013,410                      | 1,893,884,214                | 235,269,383                           | 197,005,739                           | 128,438,005                   | 176,245,686                   | 1,170,384                 |
| 22              | PERCENT                                      |                                   | 100.000%                           | 71.956%                      | 8.939%                                | 7.485%                                | 4.880%                        | 6.696%                        | 0.044%                    |
| 23              | GROSS PLANT                                  | 12                                | 2,737,191,110                      | 1,969,659,474                | 244,925,462                           | 205,070,215                           | 133,379,395                   | 182,893,572                   | 1,262,992                 |
| 24              | PERCENT                                      |                                   | 100.000%                           | 71.959%                      | 8.948%                                | 7.492%                                | 4.873%                        | 6.682%                        | 0.046%                    |
| 25              | MAINS - ACCOUNT 376                          | 13                                | 1,804,917,543                      | 1,193,597,577                | 162,524,603                           | 170,212,309                           | 116,452,506                   | 161,838,845                   | 291,702                   |
| 26              | PERCENT                                      |                                   | 100.000%                           | 66.130%                      | 9.005%                                | 9.430%                                | 6.452%                        | 8.967%                        | 0.016%                    |

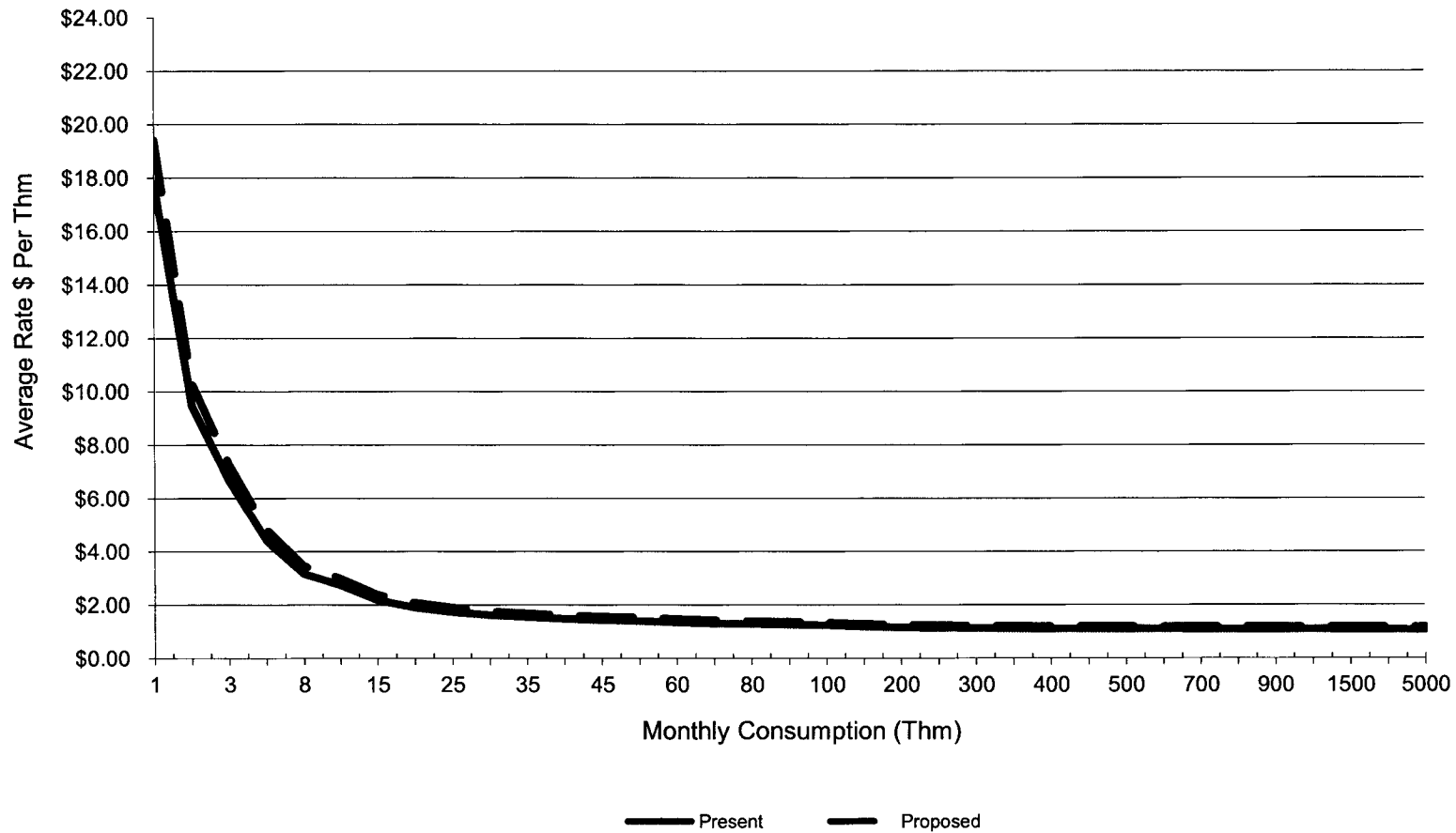
**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**ALLOCATION FACTORS (CONT.)**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019**

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

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

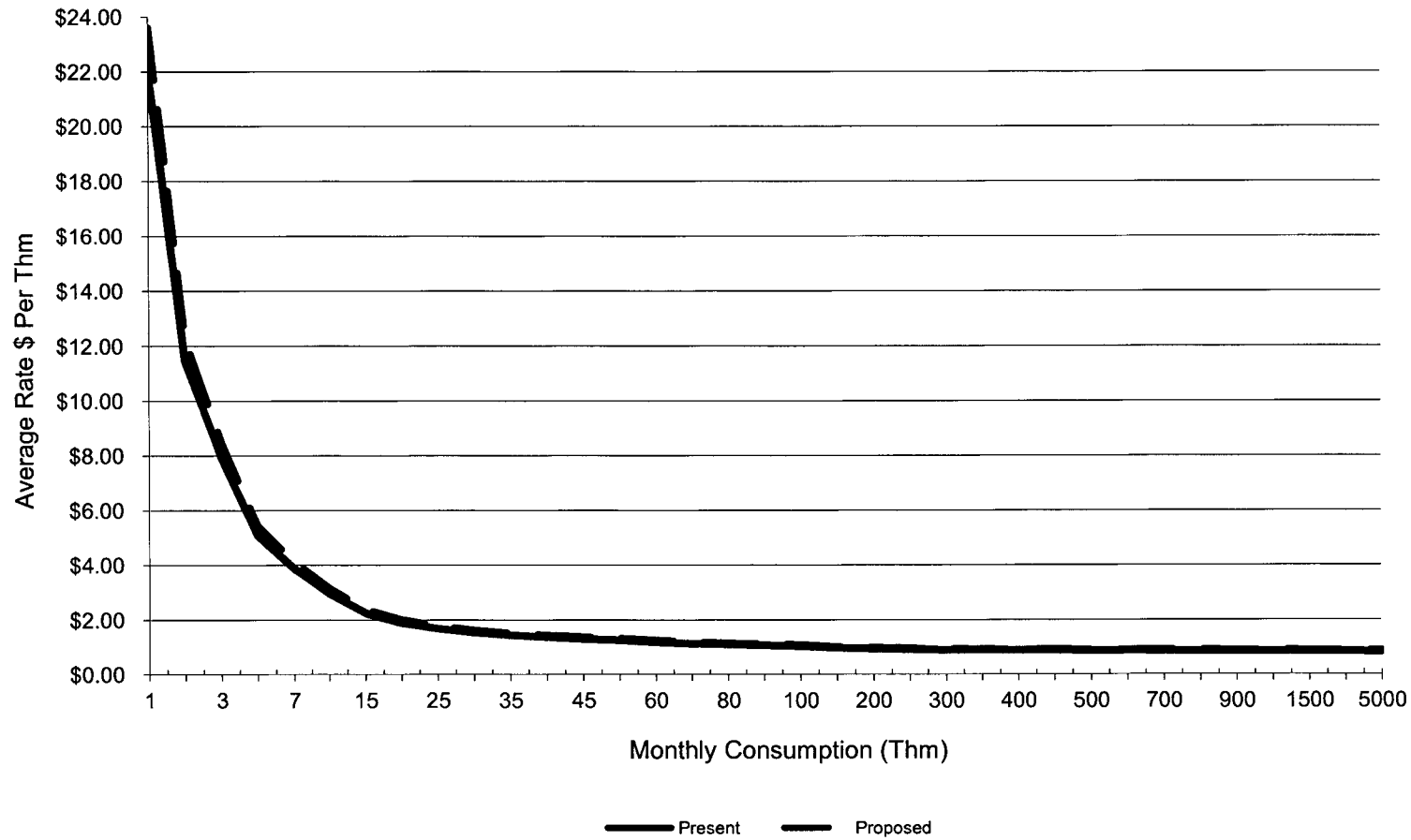
| <b>LINE<br/>NO.</b> | <b>DESCRIPTION<br/>(A)</b>                  | <b>ALLOC<br/>FACTOR<br/>(B)</b> | <b>TOTAL<br/>COMPANY<br/>(C)</b> | <b>RSS/RDS<br/>(D)</b> | <b>SGSS1/SCD1/SGDS1<br/>(E)</b> | <b>SGSS2/SCD2/SGDS2<br/>(F)</b> | <b>SDS/LGSS<br/>(G)</b> | <b>LDS/LGSS<br/>(H)</b> | <b>MLDS<br/>(I)</b> |
|---------------------|---------------------------------------------|---------------------------------|----------------------------------|------------------------|---------------------------------|---------------------------------|-------------------------|-------------------------|---------------------|
| 27                  | COMPOSITE DIRECT PLANT - ACCTS 376 & 380    | 14                              | 2,397,334,606                    | 1,731,788,920          | 207,737,723                     | 177,552,332                     | 117,536,625             | 162,425,336             | 293,668             |
| 28                  | PERCENT                                     |                                 | 100.000%                         | 72.239%                | 8.665%                          | 7.406%                          | 4.903%                  | 6.775%                  | 0.012%              |
| 29                  | SERVICES                                    | 15                              | 413,534,515                      | 375,686,736            | 31,559,250                      | 5,125,487                       | 755,122                 | 407,921                 | 0                   |
| 30                  | PERCENT                                     |                                 | 100.000%                         | 90.847%                | 7.632%                          | 1.239%                          | 0.183%                  | 0.099%                  | 0.000%              |
| 31                  | METERS                                      | 16                              | 29,582,143                       | 22,267,185             | 4,764,566                       | 2,226,579                       | 250,017                 | 69,958                  | 3,838               |
| 32                  | PERCENT                                     |                                 | 100.000%                         | 75.273%                | 16.106%                         | 7.527%                          | 0.845%                  | 0.236%                  | 0.013%              |
| 33                  | INDUSTRIAL M & R                            | 17                              | 5,640,975                        | 0                      | 151,859                         | 968,514                         | 1,976,017               | 2,544,585               | 0                   |
| 34                  | PERCENT                                     |                                 | 100.000%                         | 0.000%                 | 2.692%                          | 17.169%                         | 35.030%                 | 45.109%                 | 0.000%              |
| 35                  | OTHER DISTRIBUTION O & M EXPENSES           | 18                              | 49,893,232                       | 37,717,509             | 4,390,723                       | 3,109,382                       | 1,984,164               | 2,686,687               | 4,767               |
| 36                  | PERCENT                                     |                                 | 100.000%                         | 75.596%                | 8.800%                          | 6.232%                          | 3.977%                  | 5.385%                  | 0.010%              |
| 37                  | O & M EXCL GAS PUR, UNCOLLECTIBLES, & A & G | 19                              | 74,735,516                       | 58,137,763             | 6,502,116                       | 4,168,398                       | 2,532,190               | 3,386,807               | 8,243               |
| 38                  | PERCENT                                     |                                 | 100.000%                         | 77.791%                | 8.700%                          | 5.578%                          | 3.388%                  | 4.532%                  | 0.011%              |
| 39                  | CUSTOMER/DEMAND MAINS                       | 20                              |                                  |                        |                                 |                                 |                         |                         |                     |
| 40                  | PERCENT                                     |                                 | 100.000%                         | 76.123%                | 8.749%                          | 7.008%                          | 4.863%                  | 3.257%                  | 0.000%              |
| 41                  | HOUSE REGULATORS (GPA 383)                  | 21                              | 3,006,915                        | 2,725,549              | 230,087                         | 45,166                          | 5,009                   | 996                     | 108                 |
| 42                  | PERCENT                                     |                                 | 100.00%                          | 90.642%                | 7.652%                          | 1.502%                          | 0.167%                  | 0.033%                  | 0.004%              |
| 43                  | AVERAGE - ALLOCATORS 5 & 20                 | 22                              |                                  |                        |                                 |                                 |                         |                         |                     |
| 44                  | PERCENT                                     |                                 | 100.00%                          | 66.141%                | 9.006%                          | 9.432%                          | 6.453%                  | 8.968%                  | 0.000%              |
| 45                  | METERS AND HOUSE REGULATORS                 | 23                              | 119,886,452                      | 92,881,101             | 17,857,297                      | 7,989,316                       | 896,623                 | 248,076                 | 14,040              |
| 46                  | PERCENT                                     |                                 | 100.000%                         | 77.474%                | 14.895%                         | 6.664%                          | 0.748%                  | 0.207%                  | 0.012%              |
| 47                  | LABOR                                       | 24                              | 30,125,334                       | 23,069,380             | 2,673,356                       | 1,786,262                       | 1,107,447               | 1,485,900               | 2,990               |
| 48                  | PERCENT                                     |                                 | 100.000%                         | 76.579%                | 8.874%                          | 5.929%                          | 3.676%                  | 4.932%                  | 0.010%              |
| 49                  | SALES AND CHOICE TRANSPORTATION             | 25                              | 46,510,327                       | 34,437,601             | 6,205,037                       | 5,028,935                       | 766,053                 | 0                       | 72,700              |
| 50                  | PERCENT                                     |                                 | 100.000%                         | 74.043%                | 13.341%                         | 10.813%                         | 1.647%                  | 0.000%                  | 0.156%              |
| 51                  | C&I NETWORK CUSTOMERS                       | 26                              | 667                              | 0                      | 0                               | 136                             | 430                     | 90                      | 11                  |
| 52                  | PERCENT                                     |                                 | 100.000%                         | 0.000%                 | 0.000%                          | 20.390%                         | 64.468%                 | 13.493%                 | 1.649%              |

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

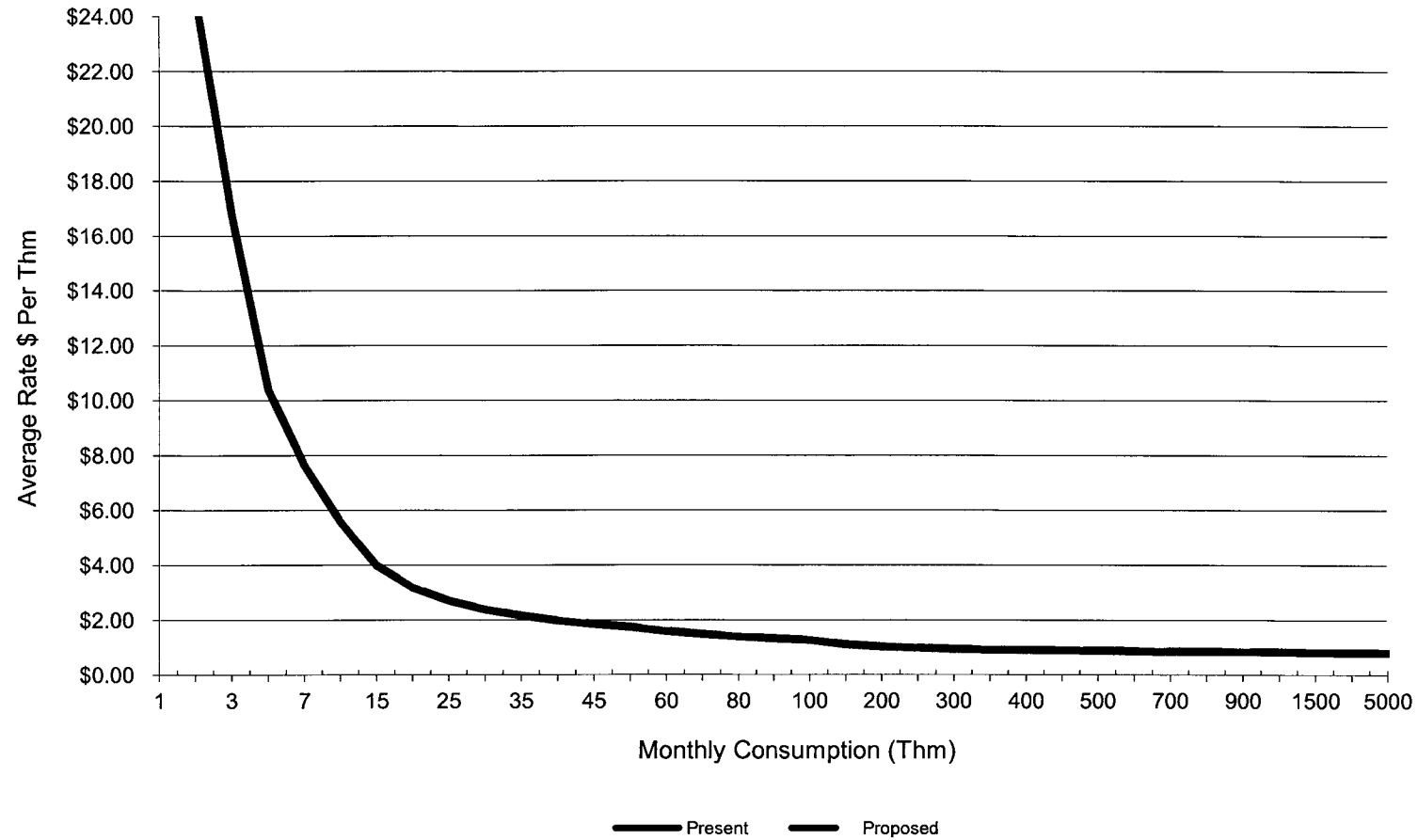




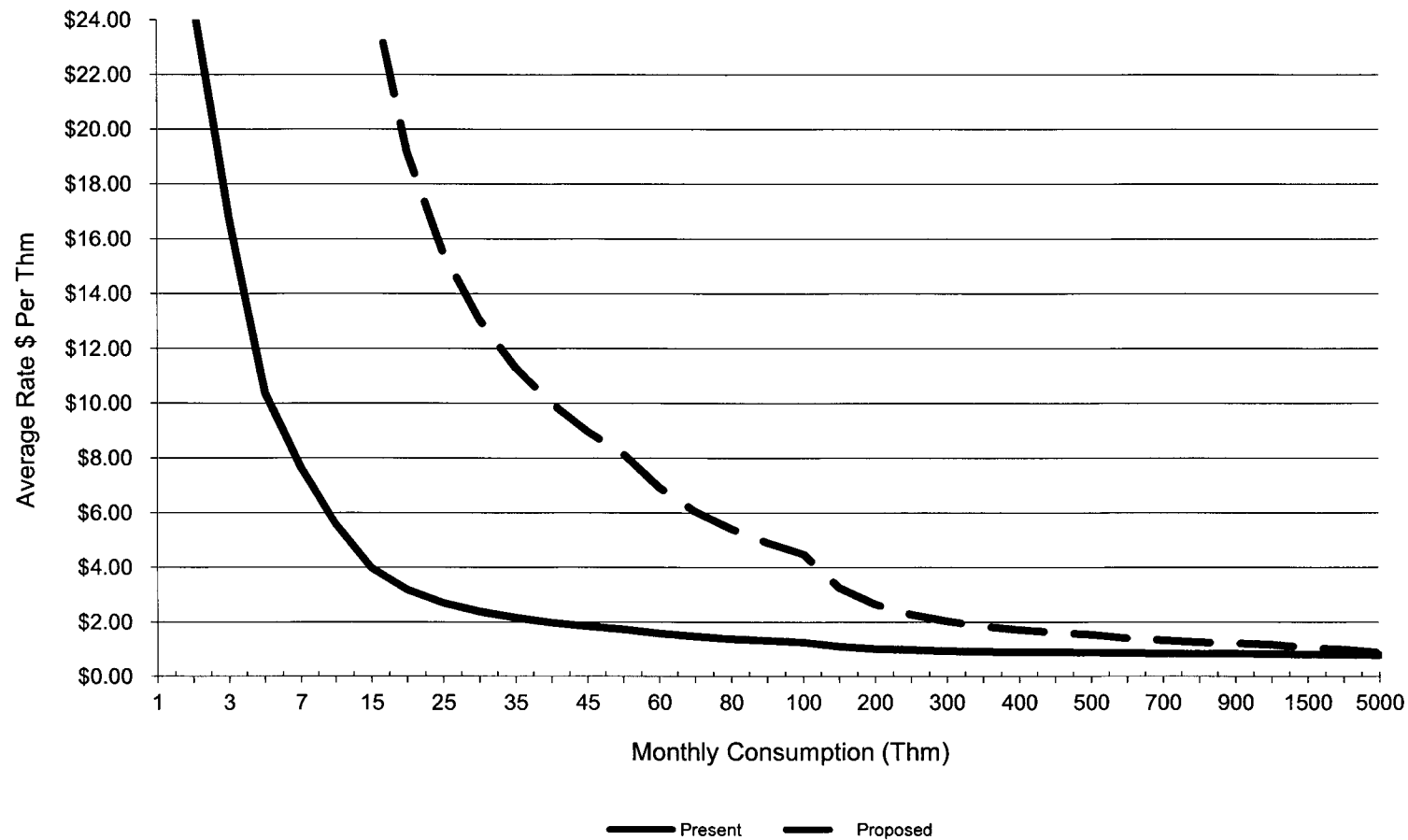
COLUMBIA GAS OF PENNSYLVANIA, INC  
PRESENT AND PROPOSED RATES  
Small General Sales Service ( $\leq 6,440$  Thms Annually)



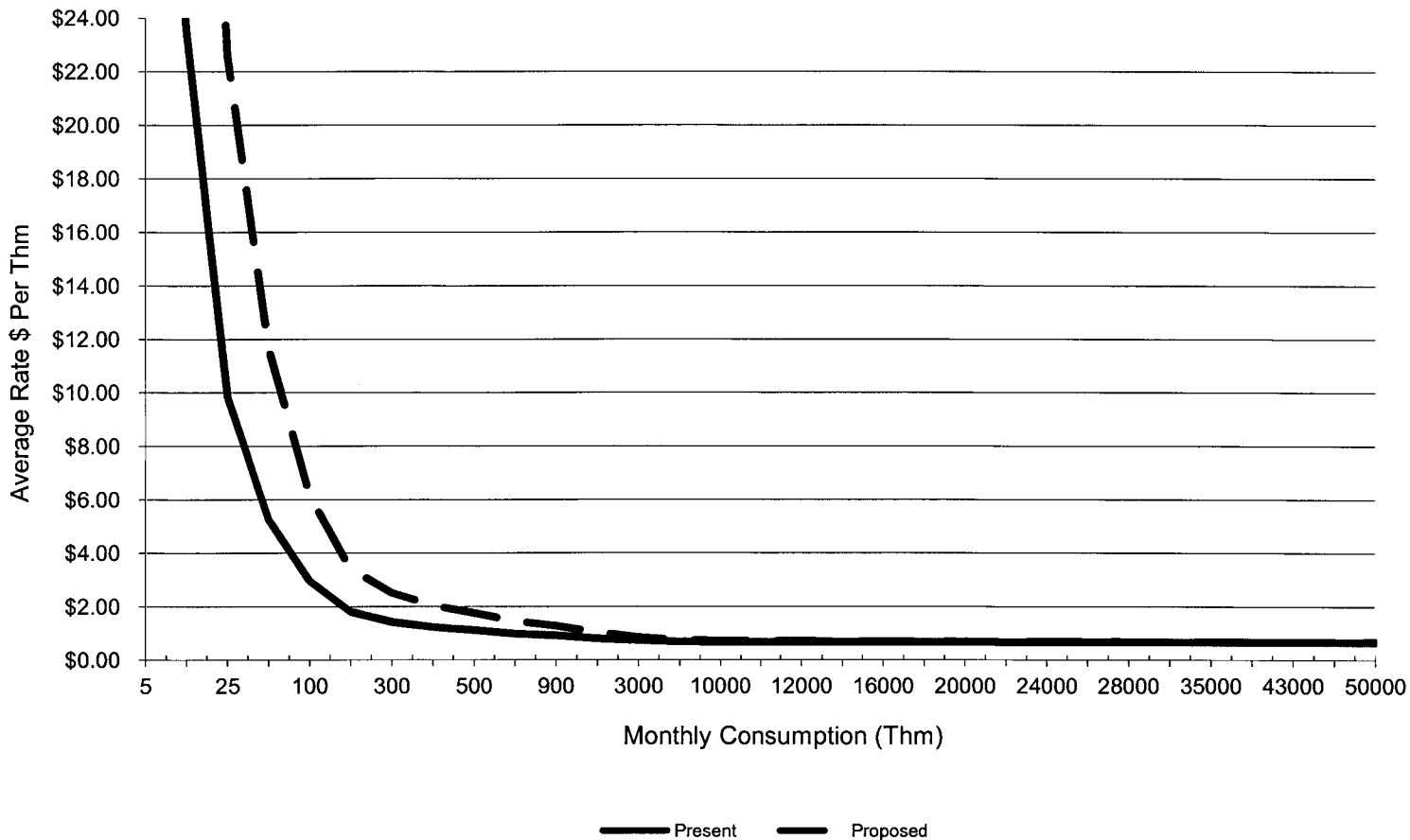
COLUMBIA GAS OF PENNSYLVANIA, INC  
PRESENT AND PROPOSED RATES  
Small General Sales Service (>6,440 and ≤64,400 Thms Annually)



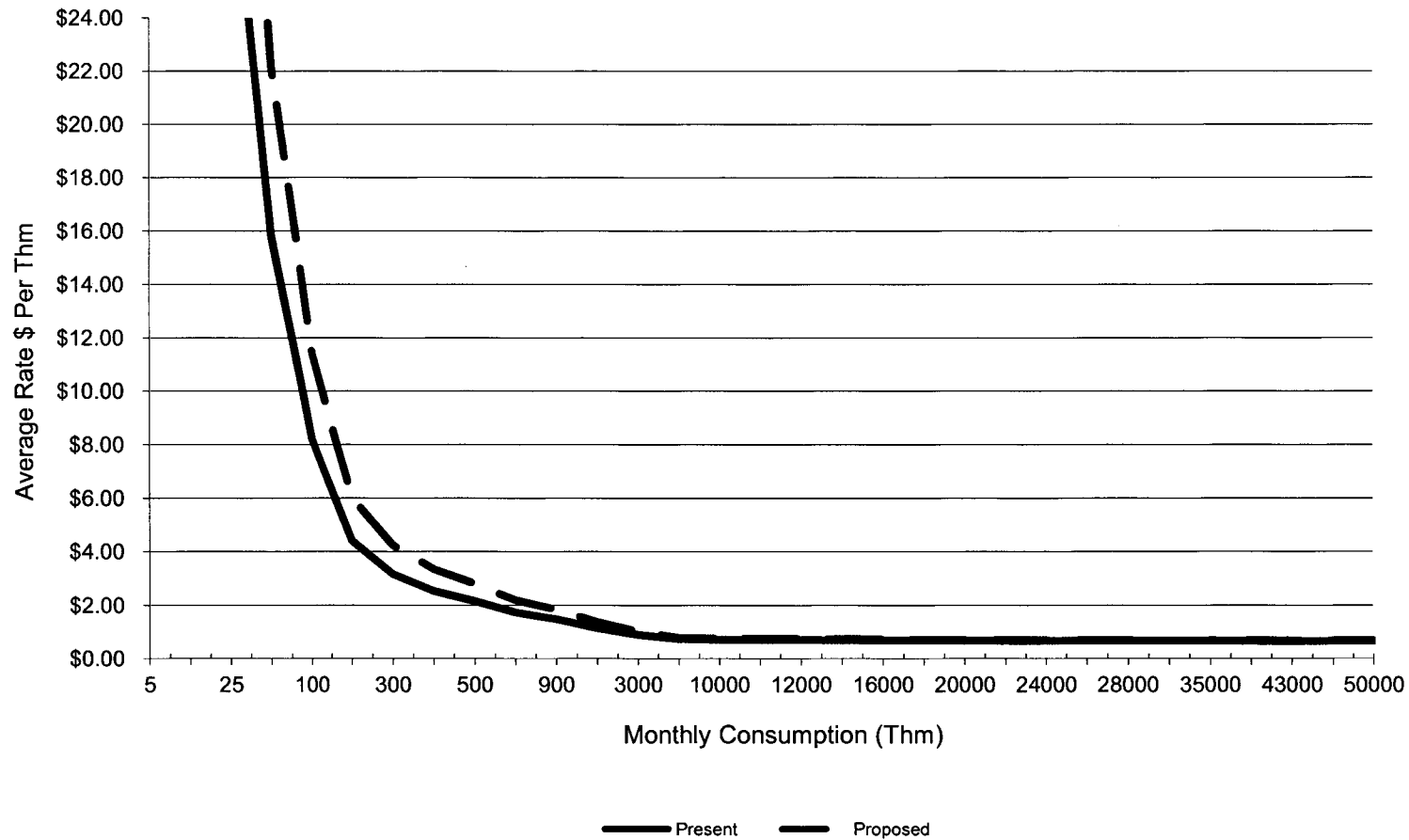
COLUMBIA GAS OF PENNSYLVANIA, INC  
PRESENT AND PROPOSED RATES  
Small General Sales Service (>6,440 and ≤64,400 Thms Annually)  
Includes C&I Network Charge



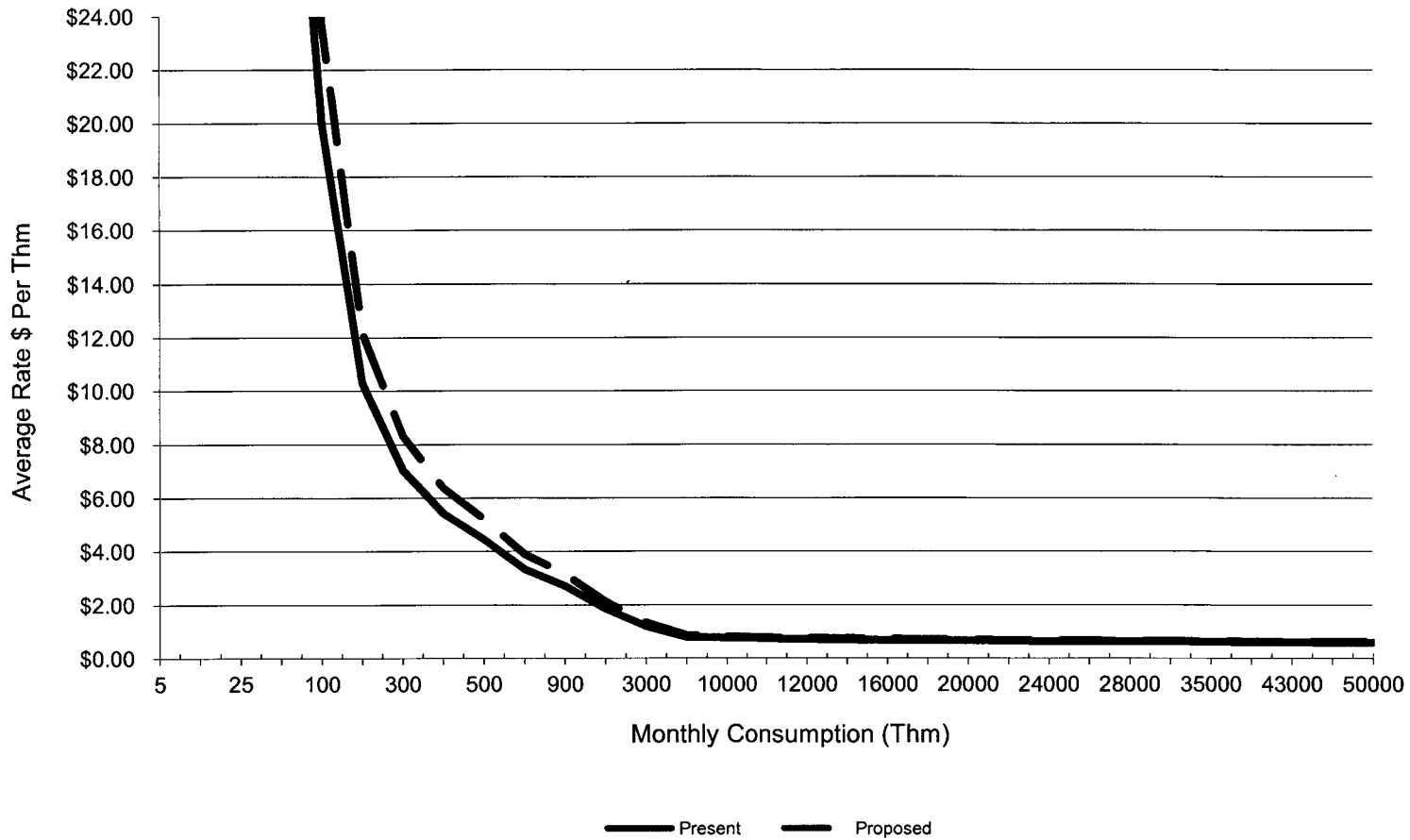
COLUMBIA GAS OF PENNSYLVANIA, INC  
PRESENT AND PROPOSED RATES  
Large General Sales Service ( $\leq 110,000$  Thms Annually)



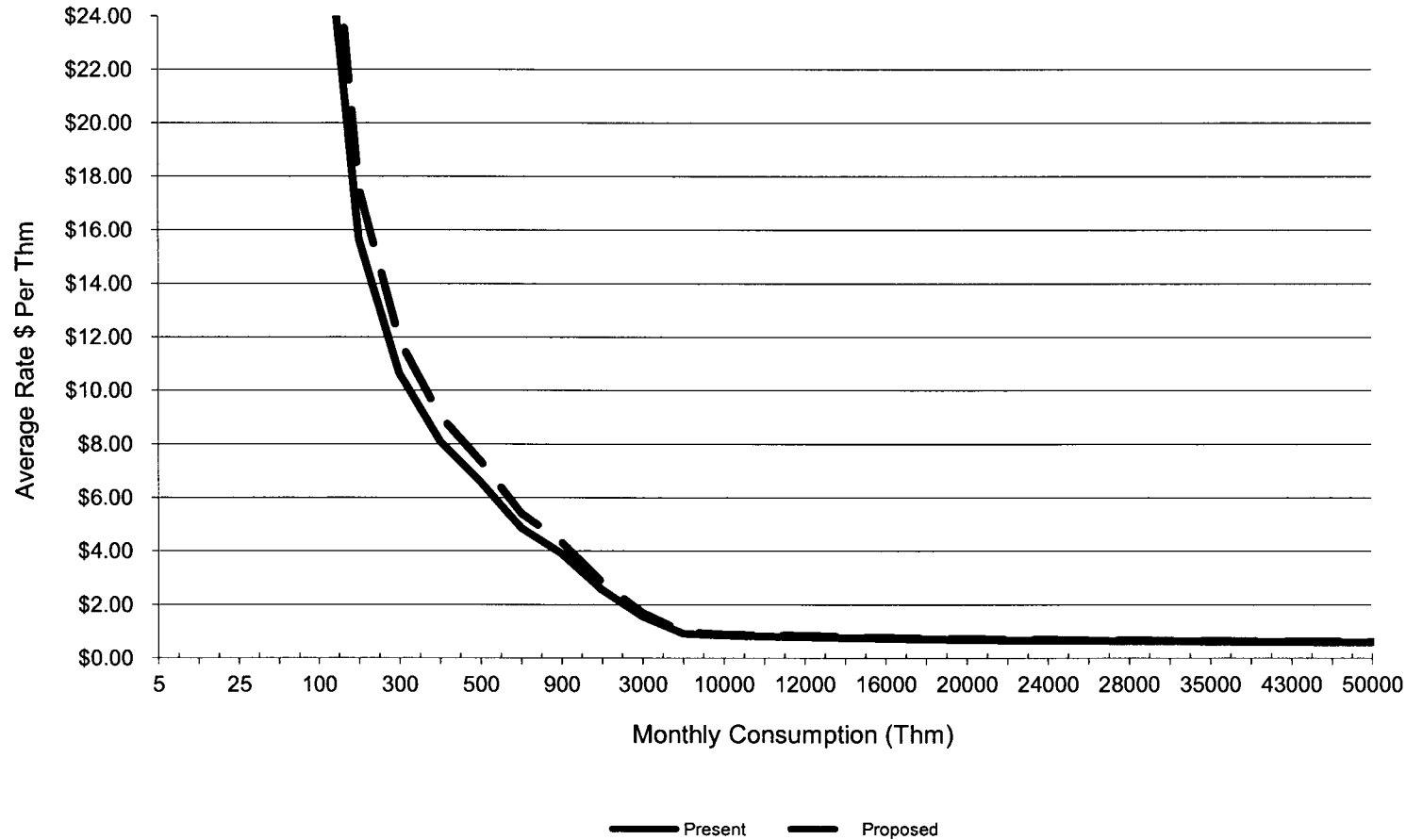
COLUMBIA GAS OF PENNSYLVANIA, INC  
PRESENT AND PROPOSED RATES  
Large General Sales Service (>110,000 and ≤540,000 Thms Annually)



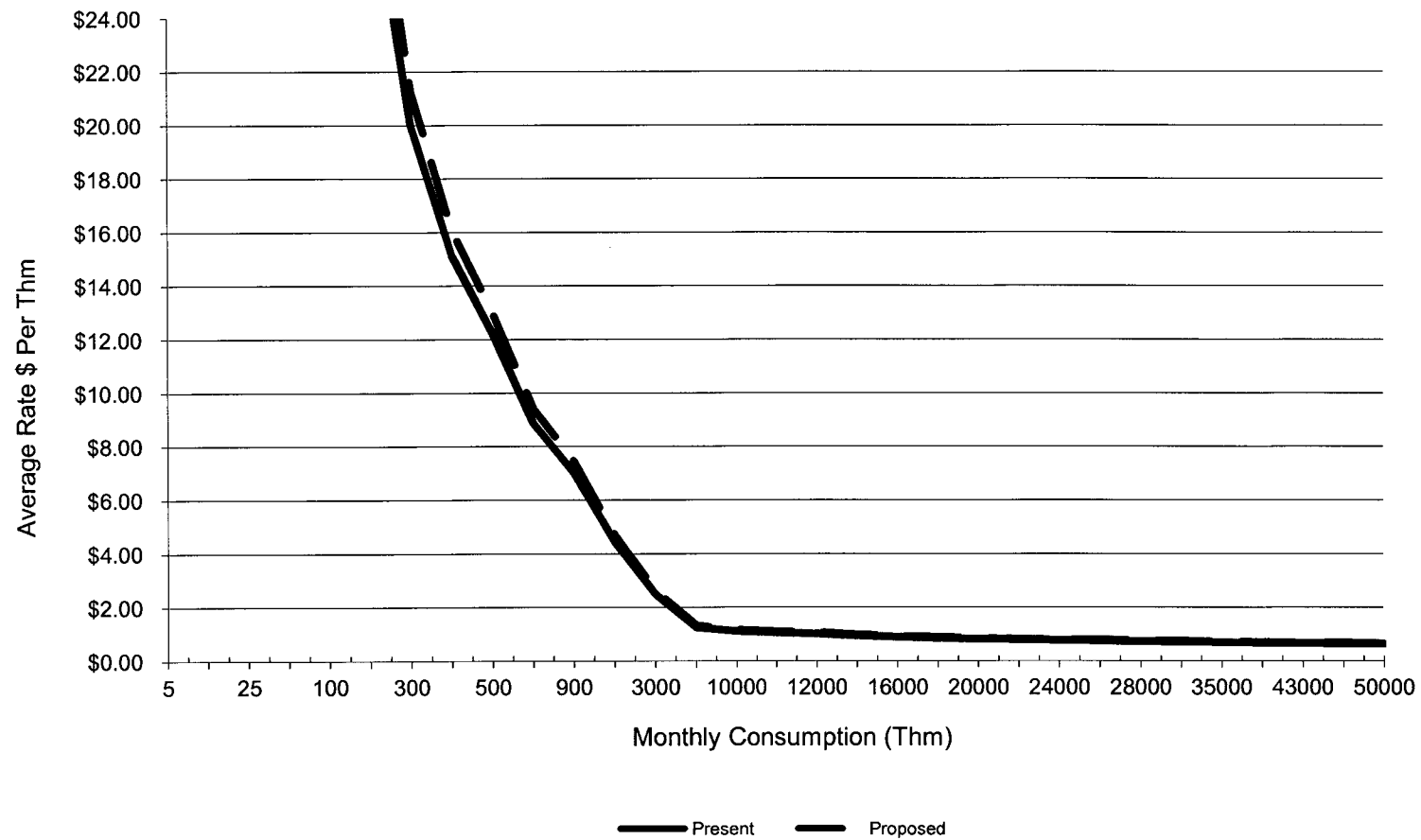
COLUMBIA GAS OF PENNSYLVANIA, INC  
PRESENT AND PROPOSED RATES  
Large General Sales Service (>540,000 and ≤1,074,000 Thms Annually)



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

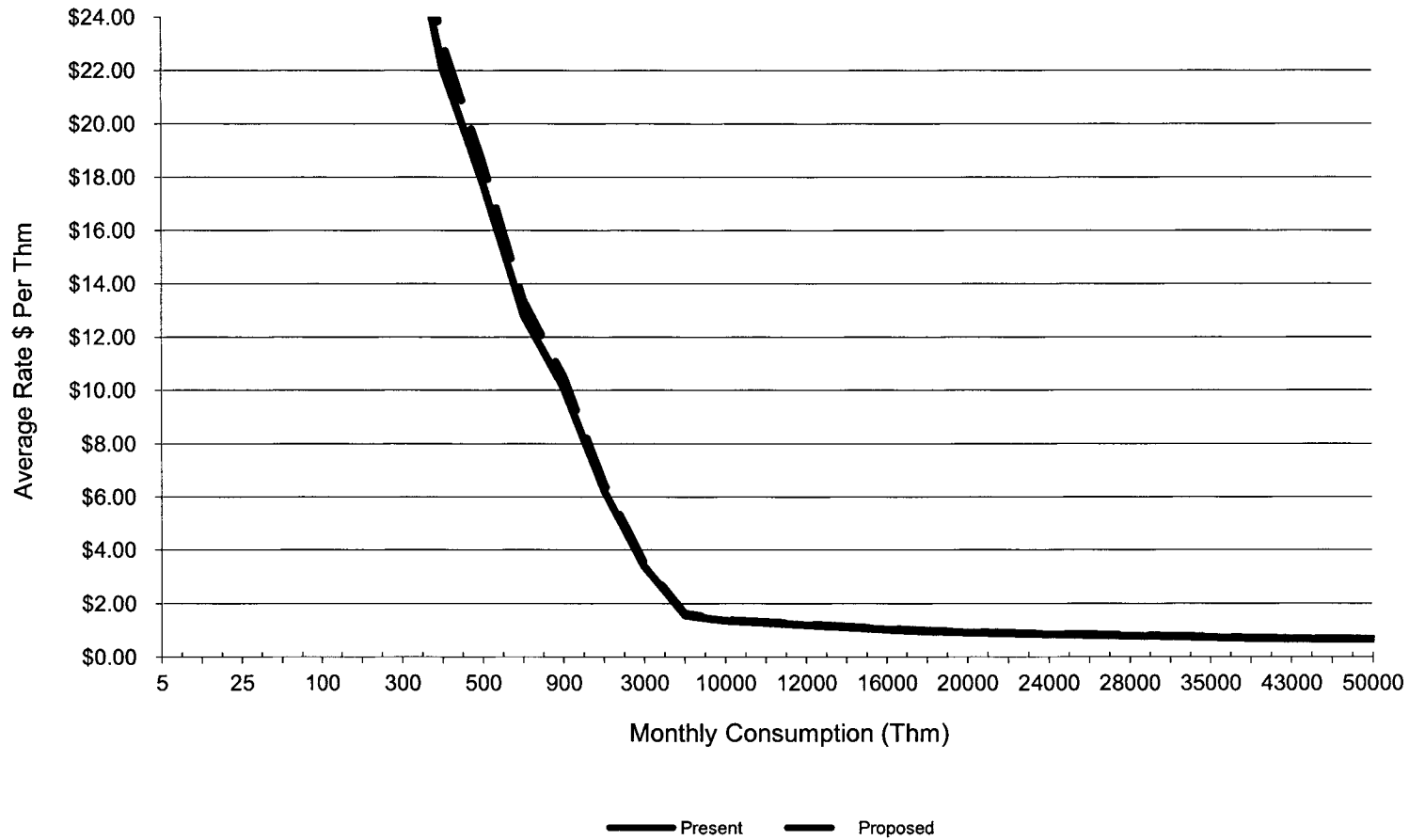


COLUMBIA GAS OF PENNSYLVANIA, INC  
PRESENT AND PROPOSED RATES  
Large General Sales Service (>3,400,000 and ≤7,500,000 Thms Annually)





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<br>RATES | PROPOSED<br>RATES |
|-------------------------------|------------------|-------------------|
| CUSTOMER CHARGE               | \$ 16.75         | \$ 18.25          |
| COMMODITY CHARGE              | \$ 0.55316       | \$ 0.64140        |
| RIDER USP                     | \$ 0.09183       | \$ 0.10009        |
| RIDER PGCC                    | \$ 0.29503       | \$ 0.29503        |
| RIDER PGDC                    | \$ 0.12373       | \$ 0.12373        |
| MERCHANT FUNCTION CHARGE      | \$ 0.00414       | \$ 0.00414        |
| GAS PROCUREMENT CHG (NON-CAP) | \$ 0.00695       | \$ 0.00695        |
| RIDER CC                      | \$ 0.00010       | \$ 0.00010        |
| COMMODITY E-FACTOR            | \$ (0.00525)     | \$ (0.00525)      |
| STATE TAX ADJUSTMENT          | 0.000%           | 0.000%            |

|       |      |          |          |         |          | DIFFERENCE |         |
|-------|------|----------|----------|---------|----------|------------|---------|
| THM   |      | Present  | Proposed | Present | Proposed | Amount     | Percent |
| Usage |      | \$       | \$       | \$/Thm  | \$/Thm   | \$         | %       |
|       | 0    | 16.75    | 18.25    |         |          | 1.50       | 8.96%   |
|       | 1    | 17.81    | 19.41    | 17.81   | 19.41    | 1.60       | 8.98%   |
|       | 2    | 18.89    | 20.58    | 9.45    | 10.29    | 1.69       | 8.95%   |
|       | 3    | 19.95    | 21.74    | 6.65    | 7.25     | 1.79       | 8.97%   |
|       | 5    | 22.09    | 24.08    | 4.42    | 4.82     | 1.99       | 9.01%   |
|       | 8    | 25.31    | 27.58    | 3.16    | 3.45     | 2.27       | 8.97%   |
|       | 10   | 27.45    | 29.91    | 2.75    | 2.99     | 2.46       | 8.96%   |
|       | 15   | 32.79    | 35.74    | 2.19    | 2.38     | 2.95       | 9.00%   |
|       | 20   | 38.14    | 41.57    | 1.91    | 2.08     | 3.43       | 8.99%   |
|       | 25   | 43.49    | 47.41    | 1.74    | 1.90     | 3.92       | 9.01%   |
|       | 30   | 48.84    | 53.23    | 1.63    | 1.77     | 4.39       | 8.99%   |
|       | 35   | 54.18    | 59.06    | 1.55    | 1.69     | 4.88       | 9.01%   |
|       | 40   | 59.54    | 64.90    | 1.49    | 1.62     | 5.36       | 9.00%   |
|       | 45   | 64.88    | 70.73    | 1.44    | 1.57     | 5.85       | 9.02%   |
|       | 50   | 70.24    | 76.56    | 1.40    | 1.53     | 6.32       | 9.00%   |
|       | 60   | 80.93    | 88.22    | 1.35    | 1.47     | 7.29       | 9.01%   |
|       | 70   | 91.63    | 99.88    | 1.31    | 1.43     | 8.25       | 9.00%   |
|       | 80   | 102.33   | 111.55   | 1.28    | 1.39     | 9.22       | 9.01%   |
|       | 90   | 113.02   | 123.20   | 1.26    | 1.37     | 10.18      | 9.01%   |
|       | 100  | 123.72   | 134.87   | 1.24    | 1.35     | 11.15      | 9.01%   |
|       | 150  | 177.21   | 193.18   | 1.18    | 1.29     | 15.97      | 9.01%   |
|       | 200  | 230.69   | 251.49   | 1.15    | 1.26     | 20.80      | 9.02%   |
|       | 250  | 284.18   | 309.80   | 1.14    | 1.24     | 25.62      | 9.02%   |
|       | 300  | 337.66   | 368.11   | 1.13    | 1.23     | 30.45      | 9.02%   |
|       | 350  | 391.15   | 426.42   | 1.12    | 1.22     | 35.27      | 9.02%   |
|       | 400  | 444.63   | 484.73   | 1.11    | 1.21     | 40.10      | 9.02%   |
|       | 450  | 498.12   | 543.04   | 1.11    | 1.21     | 44.92      | 9.02%   |
|       | 500  | 551.60   | 601.35   | 1.10    | 1.20     | 49.75      | 9.02%   |
|       | 600  | 658.56   | 717.96   | 1.10    | 1.20     | 59.40      | 9.02%   |
|       | 700  | 765.53   | 834.58   | 1.09    | 1.19     | 69.05      | 9.02%   |
|       | 800  | 872.50   | 951.20   | 1.09    | 1.19     | 78.70      | 9.02%   |
|       | 900  | 979.47   | 1,067.82 | 1.09    | 1.19     | 88.35      | 9.02%   |
|       | 1000 | 1,086.44 | 1,184.44 | 1.09    | 1.18     | 98.00      | 9.02%   |
|       | 1500 | 1,621.29 | 1,767.54 | 1.08    | 1.18     | 146.25     | 9.02%   |
|       | 2000 | 2,156.13 | 2,350.63 | 1.08    | 1.18     | 194.50     | 9.02%   |
|       | 5000 | 5,365.20 | 5,849.20 | 1.07    | 1.17     | 484.00     | 9.02%   |

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

|                          | PRESENT<br>RATES | PROPOSED<br>RATES |
|--------------------------|------------------|-------------------|
| CUSTOMER CHARGE          | \$ 21.25         | \$ 22.75          |
| ALL GAS CONSUMED         | \$ 0.40870       | \$ 0.43643        |
| RIDER PGCC               | \$ 0.29503       | \$ 0.29503        |
| RIDER PGDC               | \$ 0.12373       | \$ 0.12373        |
| MERCHANT FUNCTION CHARGE | \$ 0.00087       | \$ 0.00087        |
| GAS PROCUREMENT CHARGE   | \$ 0.00695       | \$ 0.00695        |
| RIDER CC                 | \$ 0.00010       | \$ 0.00010        |
| COMMODITY E-FACTOR       | \$ (0.00525)     | \$ (0.00525)      |
| STATE TAX ADJUSTMENT     | 0.000%           | 0.000%            |

| THM   | Present<br>\$ | Proposed<br>\$ | Present<br>\$/Thm | Proposed<br>\$/Thm | DIFFERENCE   |              |
|-------|---------------|----------------|-------------------|--------------------|--------------|--------------|
|       |               |                |                   |                    | Amount<br>\$ | Percent<br>% |
| Usage |               |                |                   |                    |              |              |
| 0     | 21.25         | 22.75          |                   |                    | 1.50         | 7.06%        |
| 1     | 22.08         | 23.61          | 22.08             | 23.61              | 1.53         | 6.93%        |
| 2     | 22.91         | 24.47          | 11.46             | 12.24              | 1.56         | 6.81%        |
| 3     | 23.74         | 25.33          | 7.91              | 8.44               | 1.59         | 6.70%        |
| 5     | 25.40         | 27.04          | 5.08              | 5.41               | 1.64         | 6.46%        |
| 7     | 27.06         | 28.75          | 3.87              | 4.11               | 1.69         | 6.25%        |
| 10    | 29.55         | 31.32          | 2.96              | 3.13               | 1.77         | 5.99%        |
| 15    | 33.70         | 35.61          | 2.25              | 2.37               | 1.91         | 5.67%        |
| 20    | 37.85         | 39.90          | 1.89              | 2.00               | 2.05         | 5.42%        |
| 25    | 42.00         | 44.19          | 1.68              | 1.77               | 2.19         | 5.21%        |
| 30    | 46.15         | 48.48          | 1.54              | 1.62               | 2.33         | 5.05%        |
| 35    | 50.30         | 52.77          | 1.44              | 1.51               | 2.47         | 4.91%        |
| 40    | 54.45         | 57.06          | 1.36              | 1.43               | 2.61         | 4.79%        |
| 45    | 58.60         | 61.35          | 1.30              | 1.36               | 2.75         | 4.69%        |
| 50    | 62.75         | 65.64          | 1.26              | 1.31               | 2.89         | 4.61%        |
| 60    | 71.05         | 74.21          | 1.18              | 1.24               | 3.16         | 4.45%        |
| 70    | 79.35         | 82.78          | 1.13              | 1.18               | 3.43         | 4.32%        |
| 80    | 87.65         | 91.35          | 1.10              | 1.14               | 3.70         | 4.22%        |
| 90    | 95.95         | 99.92          | 1.07              | 1.11               | 3.97         | 4.14%        |
| 100   | 104.25        | 108.49         | 1.04              | 1.08               | 4.24         | 4.07%        |
| 150   | 145.76        | 151.38         | 0.97              | 1.01               | 5.62         | 3.86%        |
| 200   | 187.27        | 194.27         | 0.94              | 0.97               | 7.00         | 3.74%        |
| 250   | 228.78        | 237.16         | 0.92              | 0.95               | 8.38         | 3.66%        |
| 300   | 270.29        | 280.05         | 0.90              | 0.93               | 9.76         | 3.61%        |
| 350   | 311.80        | 322.94         | 0.89              | 0.92               | 11.14        | 3.57%        |
| 400   | 353.31        | 365.83         | 0.88              | 0.91               | 12.52        | 3.54%        |
| 450   | 394.82        | 408.72         | 0.88              | 0.91               | 13.90        | 3.52%        |
| 500   | 436.33        | 451.61         | 0.87              | 0.90               | 15.28        | 3.50%        |
| 600   | 519.34        | 537.39         | 0.87              | 0.90               | 18.05        | 3.48%        |
| 700   | 602.35        | 623.17         | 0.86              | 0.89               | 20.82        | 3.46%        |
| 800   | 685.36        | 708.95         | 0.86              | 0.89               | 23.59        | 3.44%        |
| 900   | 768.37        | 794.73         | 0.85              | 0.88               | 26.36        | 3.43%        |
| 1000  | 851.38        | 880.51         | 0.85              | 0.88               | 29.13        | 3.42%        |
| 1500  | 1,266.45      | 1,309.45       | 0.84              | 0.87               | 43.00        | 3.40%        |
| 2000  | 1,681.52      | 1,738.39       | 0.84              | 0.87               | 56.87        | 3.38%        |
| 5000  | 4,171.91      | 4,311.97       | 0.83              | 0.86               | 140.06       | 3.36%        |

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<br>RATES | PROPOSED<br>RATES |
|--------------------------|------------------|-------------------|
| CUSTOMER CHARGE          | \$ 48.00         | \$ 48.00          |
| ALL GAS CONSUMED         | \$ 0.36288       | \$ 0.38082        |
| RIDER PGCC               | \$ 0.29503       | \$ 0.29503        |
| RIDER PGDC               | \$ 0.12373       | \$ 0.12373        |
| MERCHANT FUNCTION CHARGE | \$ 0.00087       | \$ 0.00087        |
| GAS PROCUREMENT CHARGE   | \$ 0.00695       | \$ 0.00695        |
| RIDER CC                 | \$ 0.00010       | \$ 0.00010        |
| COMMODITY E-FACTOR       | \$ (0.00525)     | \$ (0.00525)      |
| STATE TAX ADJUSTMENT     | 0.000%           | 0.000%            |

| THM   | Present<br>\$ | Proposed<br>\$ | Present<br>\$/Thm | Proposed<br>\$/Thm | DIFFERENCE   |              |
|-------|---------------|----------------|-------------------|--------------------|--------------|--------------|
|       |               |                |                   |                    | Amount<br>\$ | Percent<br>% |
| Usage |               |                |                   |                    |              |              |
| 0     | 48.00         | 48.00          |                   |                    | -            | 0.00%        |
| 1     | 48.78         | 48.80          | 48.78             | 48.80              | 0.02         | 0.04%        |
| 2     | 49.56         | 49.60          | 24.78             | 24.80              | 0.04         | 0.08%        |
| 3     | 50.34         | 50.40          | 16.78             | 16.80              | 0.06         | 0.12%        |
| 5     | 51.91         | 52.00          | 10.38             | 10.40              | 0.09         | 0.17%        |
| 7     | 53.48         | 53.60          | 7.64              | 7.66               | 0.12         | 0.22%        |
| 10    | 55.83         | 56.00          | 5.58              | 5.60               | 0.17         | 0.30%        |
| 15    | 59.75         | 60.01          | 3.98              | 4.00               | 0.26         | 0.44%        |
| 20    | 63.67         | 64.02          | 3.18              | 3.20               | 0.35         | 0.55%        |
| 25    | 67.59         | 68.03          | 2.70              | 2.72               | 0.44         | 0.65%        |
| 30    | 71.51         | 72.04          | 2.38              | 2.40               | 0.53         | 0.74%        |
| 35    | 75.43         | 76.05          | 2.16              | 2.17               | 0.62         | 0.82%        |
| 40    | 79.35         | 80.06          | 1.98              | 2.00               | 0.71         | 0.89%        |
| 45    | 83.27         | 84.07          | 1.85              | 1.87               | 0.80         | 0.96%        |
| 50    | 87.19         | 88.08          | 1.74              | 1.76               | 0.89         | 1.02%        |
| 60    | 95.03         | 96.10          | 1.58              | 1.60               | 1.07         | 1.13%        |
| 70    | 102.87        | 104.12         | 1.47              | 1.49               | 1.25         | 1.22%        |
| 80    | 110.71        | 112.14         | 1.38              | 1.40               | 1.43         | 1.29%        |
| 90    | 118.55        | 120.16         | 1.32              | 1.34               | 1.61         | 1.36%        |
| 100   | 126.39        | 128.18         | 1.26              | 1.28               | 1.79         | 1.42%        |
| 150   | 165.60        | 168.29         | 1.10              | 1.12               | 2.69         | 1.62%        |
| 200   | 204.81        | 208.40         | 1.02              | 1.04               | 3.59         | 1.75%        |
| 250   | 244.02        | 248.51         | 0.98              | 0.99               | 4.49         | 1.84%        |
| 300   | 283.23        | 288.62         | 0.94              | 0.96               | 5.39         | 1.90%        |
| 350   | 322.44        | 328.73         | 0.92              | 0.94               | 6.29         | 1.95%        |
| 400   | 361.65        | 368.84         | 0.90              | 0.92               | 7.19         | 1.99%        |
| 450   | 400.86        | 408.95         | 0.89              | 0.91               | 8.09         | 2.02%        |
| 500   | 440.07        | 449.06         | 0.88              | 0.90               | 8.99         | 2.04%        |
| 600   | 518.50        | 529.28         | 0.86              | 0.88               | 10.78        | 2.08%        |
| 700   | 596.93        | 609.50         | 0.85              | 0.87               | 12.57        | 2.11%        |
| 800   | 675.36        | 689.72         | 0.84              | 0.86               | 14.36        | 2.13%        |
| 900   | 753.79        | 769.94         | 0.84              | 0.86               | 16.15        | 2.14%        |
| 1000  | 832.22        | 850.16         | 0.83              | 0.85               | 17.94        | 2.16%        |
| 1500  | 1,224.38      | 1,251.29       | 0.82              | 0.83               | 26.91        | 2.20%        |
| 2000  | 1,616.54      | 1,652.42       | 0.81              | 0.83               | 35.88        | 2.22%        |
| 5000  | 3,969.47      | 4,059.17       | 0.79              | 0.81               | 89.70        | 2.26%        |

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  
with C&I NETWORK CHARGE

|                    | PRESENT<br>RATES | PROPOSED<br>RATES |                                                     |
|--------------------|------------------|-------------------|-----------------------------------------------------|
| CUSTOMER CHARGE    | \$ 48.00         | \$ 48.00          |                                                     |
| C&I NETWORK CHARGE | \$ -             | \$ 319.60         | Applicable to customers with >= 50,000 thm annually |
| ALL GAS CONSUMED   | \$ 0.36288       | \$ 0.38082        |                                                     |

|                          |              |              |
|--------------------------|--------------|--------------|
| RIDER PGCC               | \$ 0.29503   | \$ 0.29503   |
| RIDER PGDC               | \$ 0.12373   | \$ 0.12373   |
| MERCHANT FUNCTION CHARGE | \$ 0.00087   | \$ 0.00087   |
| GAS PROCUREMENT CHARGE   | \$ 0.00695   | \$ 0.00695   |
| RIDER CC                 | \$ 0.00010   | \$ 0.00010   |
| COMMODITY E-FACTOR       | \$ (0.00525) | \$ (0.00525) |

|                      |        |        |
|----------------------|--------|--------|
| STATE TAX ADJUSTMENT | 0.000% | 0.000% |
|----------------------|--------|--------|

| THM   | Present<br>\$ | Proposed<br>\$ | Present<br>\$/Thm | Proposed<br>\$/Thm | DIFFERENCE   |              |
|-------|---------------|----------------|-------------------|--------------------|--------------|--------------|
|       |               |                |                   |                    | Amount<br>\$ | Percent<br>% |
| Usage |               |                |                   |                    |              |              |
| 0     | 48.00         | 367.60         |                   |                    | 319.60       | 665.83%      |
| 1     | 48.78         | 368.40         | 48.78             | 368.40             | 319.62       | 655.23%      |
| 2     | 49.56         | 369.20         | 24.78             | 184.60             | 319.64       | 644.96%      |
| 3     | 50.34         | 370.00         | 16.78             | 123.33             | 319.66       | 635.00%      |
| 5     | 51.91         | 371.60         | 10.38             | 74.32              | 319.69       | 615.85%      |
| 7     | 53.48         | 373.20         | 7.64              | 53.31              | 319.72       | 597.83%      |
| 10    | 55.83         | 375.60         | 5.58              | 37.56              | 319.77       | 572.76%      |
| 15    | 59.75         | 379.61         | 3.98              | 25.31              | 319.86       | 535.33%      |
| 20    | 63.67         | 383.62         | 3.18              | 19.18              | 319.95       | 502.51%      |
| 25    | 67.59         | 387.63         | 2.70              | 15.51              | 320.04       | 473.50%      |
| 30    | 71.51         | 391.64         | 2.38              | 13.05              | 320.13       | 447.67%      |
| 35    | 75.43         | 395.65         | 2.16              | 11.30              | 320.22       | 424.53%      |
| 40    | 79.35         | 399.66         | 1.98              | 9.99               | 320.31       | 403.67%      |
| 45    | 83.27         | 403.67         | 1.85              | 8.97               | 320.40       | 384.77%      |
| 50    | 87.19         | 407.68         | 1.74              | 8.15               | 320.49       | 367.58%      |
| 60    | 95.03         | 415.70         | 1.58              | 6.93               | 320.67       | 337.44%      |
| 70    | 102.87        | 423.72         | 1.47              | 6.05               | 320.85       | 311.90%      |
| 80    | 110.71        | 431.74         | 1.38              | 5.40               | 321.03       | 289.97%      |
| 90    | 118.55        | 439.76         | 1.32              | 4.89               | 321.21       | 270.95%      |
| 100   | 126.39        | 447.78         | 1.26              | 4.48               | 321.39       | 254.28%      |
| 150   | 165.60        | 487.89         | 1.10              | 3.25               | 322.29       | 194.62%      |
| 200   | 204.81        | 528.00         | 1.02              | 2.64               | 323.19       | 157.80%      |
| 250   | 244.02        | 568.11         | 0.98              | 2.27               | 324.09       | 132.81%      |
| 300   | 283.23        | 608.22         | 0.94              | 2.03               | 324.99       | 114.74%      |
| 350   | 322.44        | 648.33         | 0.92              | 1.85               | 325.89       | 101.07%      |
| 400   | 361.65        | 688.44         | 0.90              | 1.72               | 326.79       | 90.36%       |
| 450   | 400.86        | 728.55         | 0.89              | 1.62               | 327.69       | 81.75%       |
| 500   | 440.07        | 768.66         | 0.88              | 1.54               | 328.59       | 74.67%       |
| 600   | 518.50        | 848.88         | 0.86              | 1.41               | 330.38       | 63.72%       |
| 700   | 596.93        | 929.10         | 0.85              | 1.33               | 332.17       | 55.65%       |
| 800   | 675.36        | 1,009.32       | 0.84              | 1.26               | 333.96       | 49.45%       |
| 900   | 753.79        | 1,089.54       | 0.84              | 1.21               | 335.75       | 44.54%       |
| 1000  | 832.22        | 1,169.76       | 0.83              | 1.17               | 337.54       | 40.56%       |
| 1500  | 1,224.38      | 1,570.89       | 0.82              | 1.05               | 346.51       | 28.30%       |
| 2000  | 1,616.54      | 1,972.02       | 0.81              | 0.99               | 355.48       | 21.99%       |
| 5000  | 3,969.47      | 4,378.77       | 0.79              | 0.88               | 409.30       | 10.31%       |

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

|                        | PRESENT<br>RATES | PROPOSED<br>RATES |
|------------------------|------------------|-------------------|
| CUSTOMER CHARGE        | \$ 229.75        | \$ 229.75         |
| C&I NETWORK CHARGE     | \$ -             | \$ 319.60         |
| ALL GAS CONSUMED       | \$ 0.23050       | \$ 0.24365        |
| RIDER PGCC             | \$ 0.29503       | \$ 0.29503        |
| RIDER PGDC             | \$ 0.12373       | \$ 0.12373        |
| GAS PROCUREMENT CHARGE | \$ 0.00695       | \$ 0.00695        |
| COMMODITY E-FACTOR     | \$ (0.00525)     | \$ (0.00525)      |
| STATE TAX ADJUSTMENT   | 0.000%           | 0.000%            |

| THM    | Present<br>\$ | Proposed<br>\$ | Present<br>\$/Thm | Proposed<br>\$/Thm | DIFFERENCE   |              |
|--------|---------------|----------------|-------------------|--------------------|--------------|--------------|
|        |               |                |                   |                    | Amount<br>\$ | Percent<br>% |
| Usage  |               |                |                   |                    |              |              |
| 0      | 229.75        | 549.35         |                   |                    | 319.60       | 139.11%      |
| 5      | 233.00        | 552.67         | 46.60             | 110.53             | 319.67       | 137.20%      |
| 10     | 236.25        | 555.99         | 23.63             | 55.60              | 319.74       | 135.34%      |
| 25     | 246.02        | 565.95         | 9.84              | 22.64              | 319.93       | 130.04%      |
| 50     | 262.29        | 582.55         | 5.25              | 11.65              | 320.26       | 122.10%      |
| 100    | 294.84        | 615.75         | 2.95              | 6.16               | 320.91       | 108.84%      |
| 200    | 359.94        | 682.17         | 1.80              | 3.41               | 322.23       | 89.52%       |
| 300    | 425.04        | 748.59         | 1.42              | 2.50               | 323.55       | 76.12%       |
| 400    | 490.14        | 815.01         | 1.23              | 2.04               | 324.87       | 66.28%       |
| 500    | 555.24        | 881.43         | 1.11              | 1.76               | 326.19       | 58.75%       |
| 700    | 685.43        | 1,014.25       | 0.98              | 1.45               | 328.82       | 47.97%       |
| 900    | 815.62        | 1,147.07       | 0.91              | 1.27               | 331.45       | 40.64%       |
| 1500   | 1,206.20      | 1,545.54       | 0.80              | 1.03               | 339.34       | 28.13%       |
| 3000   | 2,182.64      | 2,541.71       | 0.73              | 0.85               | 359.07       | 16.45%       |
| 8000   | 5,437.44      | 5,862.26       | 0.68              | 0.73               | 424.82       | 7.81%        |
| 10000  | 6,739.36      | 7,190.48       | 0.67              | 0.72               | 451.12       | 6.69%        |
| 11000  | 7,390.32      | 7,854.59       | 0.67              | 0.71               | 464.27       | 6.28%        |
| 12000  | 8,041.28      | 8,518.70       | 0.67              | 0.71               | 477.42       | 5.94%        |
| 14000  | 9,343.20      | 9,846.92       | 0.67              | 0.70               | 503.72       | 5.39%        |
| 16000  | 10,645.12     | 11,175.14      | 0.67              | 0.70               | 530.02       | 4.98%        |
| 18000  | 11,947.04     | 12,503.36      | 0.66              | 0.69               | 556.32       | 4.66%        |
| 20000  | 13,248.96     | 13,831.58      | 0.66              | 0.69               | 582.62       | 4.40%        |
| 22000  | 14,550.88     | 15,159.80      | 0.66              | 0.69               | 608.92       | 4.18%        |
| 24000  | 15,852.80     | 16,488.02      | 0.66              | 0.69               | 635.22       | 4.01%        |
| 26000  | 17,154.72     | 17,816.24      | 0.66              | 0.69               | 661.52       | 3.86%        |
| 28000  | 18,456.64     | 19,144.46      | 0.66              | 0.68               | 687.82       | 3.73%        |
| 30000  | 19,758.56     | 20,472.68      | 0.66              | 0.68               | 714.12       | 3.61%        |
| 35000  | 23,013.36     | 23,793.23      | 0.66              | 0.68               | 779.87       | 3.39%        |
| 40000  | 26,268.16     | 27,113.78      | 0.66              | 0.68               | 845.62       | 3.22%        |
| 43000  | 28,221.04     | 29,106.11      | 0.66              | 0.68               | 885.07       | 3.14%        |
| 45000  | 29,522.96     | 30,434.33      | 0.66              | 0.68               | 911.37       | 3.09%        |
| 50000  | 32,777.76     | 33,754.88      | 0.66              | 0.68               | 977.12       | 2.98%        |
| 54000  | 35,381.60     | 36,411.32      | 0.66              | 0.67               | 1,029.72     | 2.91%        |
| 60000  | 39,287.36     | 40,395.98      | 0.65              | 0.67               | 1,108.62     | 2.82%        |
| 70000  | 45,796.96     | 47,037.08      | 0.65              | 0.67               | 1,240.12     | 2.71%        |
| 80000  | 52,306.56     | 53,678.18      | 0.65              | 0.67               | 1,371.62     | 2.62%        |
| 90000  | 58,816.16     | 60,319.28      | 0.65              | 0.67               | 1,503.12     | 2.56%        |
| 95000  | 62,070.96     | 63,639.83      | 0.65              | 0.67               | 1,568.87     | 2.53%        |
| 100000 | 65,325.76     | 66,960.38      | 0.65              | 0.67               | 1,634.62     | 2.50%        |
| 108000 | 70,533.44     | 72,273.26      | 0.65              | 0.67               | 1,739.82     | 2.47%        |
| 110000 | 71,835.36     | 73,601.48      | 0.65              | 0.67               | 1,766.12     | 2.46%        |

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<br>RATES | PROPOSED<br>RATES |
|------------------------|------------------|-------------------|
| CUSTOMER CHARGE        | \$ 757.34        | \$ 757.34         |
| C&I NETWORK CHARGE     | \$ -             | \$ 319.60         |
| ALL GAS CONSUMED       | \$ 0.21550       | \$ 0.22780        |
| RIDER PGCC             | \$ 0.29503       | \$ 0.29503        |
| RIDER PGDC             | \$ 0.12373       | \$ 0.12373        |
| GAS PROCUREMENT CHARGE | \$ 0.00695       | \$ 0.00695        |
| COMMODITY E-FACTOR     | \$ (0.00525)     | \$ (0.00525)      |
| STATE TAX ADJUSTMENT   | 0.000%           | 0.000%            |

| THM    | Present<br>\$ | Proposed<br>\$ | Present<br>\$/Thm | Proposed<br>\$/Thm | DIFFERENCE   |              |
|--------|---------------|----------------|-------------------|--------------------|--------------|--------------|
|        |               |                |                   |                    | Amount<br>\$ | Percent<br>% |
| Usage  |               |                |                   |                    |              |              |
| 0      | 757.34        | 1,076.94       |                   |                    | 319.60       | 42.20%       |
| 5      | 760.52        | 1,080.18       | 152.10            | 216.04             | 319.66       | 42.03%       |
| 10     | 763.70        | 1,083.42       | 76.37             | 108.34             | 319.72       | 41.86%       |
| 25     | 773.24        | 1,093.15       | 30.93             | 43.73              | 319.91       | 41.37%       |
| 50     | 789.14        | 1,109.36       | 15.78             | 22.19              | 320.22       | 40.58%       |
| 100    | 820.94        | 1,141.77       | 8.21              | 11.42              | 320.83       | 39.08%       |
| 200    | 884.54        | 1,206.60       | 4.42              | 6.03               | 322.06       | 36.41%       |
| 300    | 948.14        | 1,271.43       | 3.16              | 4.24               | 323.29       | 34.10%       |
| 400    | 1,011.74      | 1,336.26       | 2.53              | 3.34               | 324.52       | 32.08%       |
| 500    | 1,075.34      | 1,401.09       | 2.15              | 2.80               | 325.75       | 30.29%       |
| 700    | 1,202.53      | 1,530.74       | 1.72              | 2.19               | 328.21       | 27.29%       |
| 900    | 1,329.72      | 1,660.39       | 1.48              | 1.84               | 330.67       | 24.87%       |
| 1500   | 1,711.30      | 2,049.35       | 1.14              | 1.37               | 338.05       | 19.75%       |
| 3000   | 2,665.24      | 3,021.74       | 0.89              | 1.01               | 356.50       | 13.38%       |
| 8000   | 5,845.04      | 6,263.04       | 0.73              | 0.78               | 418.00       | 7.15%        |
| 10000  | 7,116.96      | 7,559.56       | 0.71              | 0.76               | 442.60       | 6.22%        |
| 11000  | 7,752.92      | 8,207.82       | 0.70              | 0.75               | 454.90       | 5.87%        |
| 12000  | 8,388.88      | 8,856.08       | 0.70              | 0.74               | 467.20       | 5.57%        |
| 14000  | 9,660.80      | 10,152.60      | 0.69              | 0.73               | 491.80       | 5.09%        |
| 16000  | 10,932.72     | 11,449.12      | 0.68              | 0.72               | 516.40       | 4.72%        |
| 18000  | 12,204.64     | 12,745.64      | 0.68              | 0.71               | 541.00       | 4.43%        |
| 20000  | 13,476.56     | 14,042.16      | 0.67              | 0.70               | 565.60       | 4.20%        |
| 22000  | 14,748.48     | 15,338.68      | 0.67              | 0.70               | 590.20       | 4.00%        |
| 24000  | 16,020.40     | 16,635.20      | 0.67              | 0.69               | 614.80       | 3.84%        |
| 26000  | 17,292.32     | 17,931.72      | 0.67              | 0.69               | 639.40       | 3.70%        |
| 28000  | 18,564.24     | 19,228.24      | 0.66              | 0.69               | 664.00       | 3.58%        |
| 30000  | 19,836.16     | 20,524.76      | 0.66              | 0.68               | 688.60       | 3.47%        |
| 35000  | 23,015.96     | 23,766.06      | 0.66              | 0.68               | 750.10       | 3.26%        |
| 40000  | 26,195.76     | 27,007.36      | 0.65              | 0.68               | 811.60       | 3.10%        |
| 43000  | 28,103.64     | 28,952.14      | 0.65              | 0.67               | 848.50       | 3.02%        |
| 45000  | 29,375.56     | 30,248.66      | 0.65              | 0.67               | 873.10       | 2.97%        |
| 50000  | 32,555.36     | 33,489.96      | 0.65              | 0.67               | 934.60       | 2.87%        |
| 54000  | 35,099.20     | 36,083.00      | 0.65              | 0.67               | 983.80       | 2.80%        |
| 60000  | 38,914.96     | 39,972.56      | 0.65              | 0.67               | 1,057.60     | 2.72%        |
| 70000  | 45,274.56     | 46,455.16      | 0.65              | 0.66               | 1,180.60     | 2.61%        |
| 80000  | 51,634.16     | 52,937.76      | 0.65              | 0.66               | 1,303.60     | 2.52%        |
| 90000  | 57,993.76     | 59,420.36      | 0.64              | 0.66               | 1,426.60     | 2.46%        |
| 95000  | 61,173.56     | 62,661.66      | 0.64              | 0.66               | 1,488.10     | 2.43%        |
| 100000 | 64,353.36     | 65,902.96      | 0.64              | 0.66               | 1,549.60     | 2.41%        |
| 108000 | 69,441.04     | 71,089.04      | 0.64              | 0.66               | 1,648.00     | 2.37%        |
| 150000 | 96,151.36     | 98,315.96      | 0.64              | 0.66               | 2,164.60     | 2.25%        |
| 200000 | 127,949.36    | 130,728.96     | 0.64              | 0.65               | 2,779.60     | 2.17%        |
| 250000 | 159,747.36    | 163,141.96     | 0.64              | 0.65               | 3,394.60     | 2.12%        |
| 300000 | 191,545.36    | 195,554.96     | 0.64              | 0.65               | 4,009.60     | 2.09%        |
| 350000 | 223,343.36    | 227,967.96     | 0.64              | 0.65               | 4,624.60     | 2.07%        |
| 400000 | 255,141.36    | 260,380.96     | 0.64              | 0.65               | 5,239.60     | 2.05%        |
| 450000 | 286,939.36    | 292,793.96     | 0.64              | 0.65               | 5,854.60     | 2.04%        |
| 500000 | 318,737.36    | 325,206.96     | 0.64              | 0.65               | 6,469.60     | 2.03%        |

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<br>RATES | PROPOSED<br>RATES |
|------------------------|------------------|-------------------|
| CUSTOMER CHARGE        | \$ 1,947.06      | \$ 1,947.06       |
| C&I NETWORK CHARGE     | \$ -             | \$ 373.55         |
| ALL GAS CONSUMED       | \$ 0.12999       | \$ 0.15021        |
| RIDER PGCC             | \$ 0.29503       | \$ 0.29503        |
| RIDER PGDC             | \$ 0.12373       | \$ 0.12373        |
| GAS PROCUREMENT CHARGE | \$ 0.00695       | \$ 0.00695        |
| COMMODITY E-FACTOR     | \$ (0.00525)     | \$ (0.00525)      |
| STATE TAX ADJUSTMENT   | 0.000%           | 0.000%            |

| THM    | Present<br>\$ | Proposed<br>\$ | Present<br>\$/Thm | Proposed<br>\$/Thm | DIFFERENCE   |              |
|--------|---------------|----------------|-------------------|--------------------|--------------|--------------|
|        |               |                |                   |                    | Amount<br>\$ | Percent<br>% |
| Usage  |               |                |                   |                    |              |              |
| 0      | 1,947.06      | 2,320.61       |                   |                    | 373.55       | 19.19%       |
| 5      | 1,949.81      | 2,323.46       | 389.96            | 464.69             | 373.65       | 19.16%       |
| 10     | 1,952.56      | 2,326.31       | 195.26            | 232.63             | 373.75       | 19.14%       |
| 25     | 1,960.82      | 2,334.87       | 78.43             | 93.39              | 374.05       | 19.08%       |
| 50     | 1,974.58      | 2,349.14       | 39.49             | 46.98              | 374.56       | 18.97%       |
| 100    | 2,002.10      | 2,377.67       | 20.02             | 23.78              | 375.57       | 18.76%       |
| 200    | 2,057.15      | 2,434.74       | 10.29             | 12.17              | 377.59       | 18.36%       |
| 300    | 2,112.20      | 2,491.81       | 7.04              | 8.31               | 379.61       | 17.97%       |
| 400    | 2,167.25      | 2,548.88       | 5.42              | 6.37               | 381.63       | 17.61%       |
| 500    | 2,222.30      | 2,605.95       | 4.44              | 5.21               | 383.65       | 17.26%       |
| 700    | 2,332.39      | 2,720.08       | 3.33              | 3.89               | 387.69       | 16.62%       |
| 900    | 2,442.48      | 2,834.21       | 2.71              | 3.15               | 391.73       | 16.04%       |
| 1500   | 2,772.75      | 3,176.62       | 1.85              | 2.12               | 403.87       | 14.57%       |
| 3000   | 3,598.43      | 4,032.63       | 1.20              | 1.34               | 434.20       | 12.07%       |
| 8000   | 6,350.68      | 6,885.98       | 0.79              | 0.86               | 535.30       | 8.43%        |
| 10000  | 7,451.58      | 8,027.32       | 0.75              | 0.80               | 575.74       | 7.73%        |
| 11000  | 8,002.03      | 8,597.99       | 0.73              | 0.78               | 595.96       | 7.45%        |
| 12000  | 8,552.48      | 9,168.66       | 0.71              | 0.76               | 616.18       | 7.20%        |
| 14000  | 9,653.38      | 10,310.00      | 0.69              | 0.74               | 656.62       | 6.80%        |
| 16000  | 10,754.28     | 11,451.34      | 0.67              | 0.72               | 697.06       | 6.48%        |
| 18000  | 11,855.18     | 12,592.68      | 0.66              | 0.70               | 737.50       | 6.22%        |
| 20000  | 12,956.08     | 13,734.02      | 0.65              | 0.69               | 777.94       | 6.00%        |
| 22000  | 14,056.98     | 14,875.36      | 0.64              | 0.68               | 818.38       | 5.82%        |
| 24000  | 15,157.88     | 16,016.70      | 0.63              | 0.67               | 858.82       | 5.67%        |
| 26000  | 16,258.78     | 17,158.04      | 0.63              | 0.66               | 899.26       | 5.53%        |
| 28000  | 17,359.68     | 18,299.38      | 0.62              | 0.65               | 939.70       | 5.41%        |
| 30000  | 18,460.58     | 19,440.72      | 0.62              | 0.65               | 980.14       | 5.31%        |
| 35000  | 21,212.83     | 22,294.07      | 0.61              | 0.64               | 1,081.24     | 5.10%        |
| 40000  | 23,965.08     | 25,147.42      | 0.60              | 0.63               | 1,182.34     | 4.93%        |
| 43000  | 25,616.43     | 26,859.43      | 0.60              | 0.62               | 1,243.00     | 4.85%        |
| 45000  | 26,717.33     | 28,000.77      | 0.59              | 0.62               | 1,283.44     | 4.80%        |
| 50000  | 29,469.58     | 30,854.12      | 0.59              | 0.62               | 1,384.54     | 4.70%        |
| 54000  | 31,671.38     | 33,136.80      | 0.59              | 0.61               | 1,465.42     | 4.63%        |
| 60000  | 34,974.08     | 36,560.82      | 0.58              | 0.61               | 1,586.74     | 4.54%        |
| 70000  | 40,478.58     | 42,267.52      | 0.58              | 0.60               | 1,788.94     | 4.42%        |
| 80000  | 45,983.08     | 47,974.22      | 0.57              | 0.60               | 1,991.14     | 4.33%        |
| 90000  | 51,487.58     | 53,680.92      | 0.57              | 0.60               | 2,193.34     | 4.26%        |
| 95000  | 54,239.83     | 56,534.27      | 0.57              | 0.60               | 2,294.44     | 4.23%        |
| 100000 | 56,992.08     | 59,387.62      | 0.57              | 0.59               | 2,395.54     | 4.20%        |
| 108000 | 61,395.68     | 63,952.98      | 0.57              | 0.59               | 2,557.30     | 4.17%        |
| 150000 | 84,514.58     | 87,921.12      | 0.56              | 0.59               | 3,406.54     | 4.03%        |
| 200000 | 112,037.08    | 116,454.62     | 0.56              | 0.58               | 4,417.54     | 3.94%        |
| 250000 | 139,559.58    | 144,988.12     | 0.56              | 0.58               | 5,428.54     | 3.89%        |
| 300000 | 167,082.08    | 173,521.62     | 0.56              | 0.58               | 6,439.54     | 3.85%        |
| 350000 | 194,604.58    | 202,055.12     | 0.56              | 0.58               | 7,450.54     | 3.83%        |
| 400000 | 222,127.08    | 230,588.62     | 0.56              | 0.58               | 8,461.54     | 3.81%        |
| 450000 | 249,649.58    | 259,122.12     | 0.55              | 0.58               | 9,472.54     | 3.79%        |
| 500000 | 277,172.08    | 287,655.62     | 0.55              | 0.58               | 10,483.54    | 3.78%        |



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<br>RATES | PROPOSED<br>RATES |
|------------------------|------------------|-------------------|
| CUSTOMER CHARGE        | \$ 3,028.76      | \$ 3,028.76       |
| C&I NETWORK CHARGE     | \$ -             | \$ 373.55         |
| ALL GAS CONSUMED       | \$ 0.11530       | \$ 0.13323        |
| RIDER PGCC             | \$ 0.29503       | \$ 0.29503        |
| RIDER PGDC             | \$ 0.12373       | \$ 0.12373        |
| GAS PROCUREMENT CHARGE | \$ 0.00695       | \$ 0.00695        |
| COMMODITY E-FACTOR     | \$ (0.00525)     | \$ (0.00525)      |
| STATE TAX ADJUSTMENT   | 0.000%           | 0.000%            |

| THM    | Present<br>\$ | Proposed<br>\$ | Present<br>\$/Thm | Proposed<br>\$/Thm | DIFFERENCE   |              |
|--------|---------------|----------------|-------------------|--------------------|--------------|--------------|
|        |               |                |                   |                    | Amount<br>\$ | Percent<br>% |
| Usage  |               |                |                   |                    |              |              |
| 0      | 3,028.76      | 3,402.31       |                   |                    | 373.55       | 12.33%       |
| 5      | 3,031.44      | 3,405.08       | 606.29            | 681.02             | 373.64       | 12.33%       |
| 10     | 3,034.12      | 3,407.85       | 303.41            | 340.79             | 373.73       | 12.32%       |
| 25     | 3,042.16      | 3,416.16       | 121.69            | 136.65             | 374.00       | 12.29%       |
| 50     | 3,055.55      | 3,430.00       | 61.11             | 68.60              | 374.45       | 12.25%       |
| 100    | 3,082.34      | 3,457.68       | 30.82             | 34.58              | 375.34       | 12.18%       |
| 200    | 3,135.92      | 3,513.05       | 15.68             | 17.57              | 377.13       | 12.03%       |
| 300    | 3,189.50      | 3,568.42       | 10.63             | 11.89              | 378.92       | 11.88%       |
| 400    | 3,243.08      | 3,623.79       | 8.11              | 9.06               | 380.71       | 11.74%       |
| 500    | 3,296.66      | 3,679.16       | 6.59              | 7.36               | 382.50       | 11.60%       |
| 700    | 3,403.81      | 3,789.90       | 4.86              | 5.41               | 386.09       | 11.34%       |
| 900    | 3,510.96      | 3,900.64       | 3.90              | 4.33               | 389.68       | 11.10%       |
| 1500   | 3,832.42      | 4,232.86       | 2.55              | 2.82               | 400.44       | 10.45%       |
| 3000   | 4,636.06      | 5,063.40       | 1.55              | 1.69               | 427.34       | 9.22%        |
| 8000   | 7,314.86      | 7,831.85       | 0.91              | 0.98               | 516.99       | 7.07%        |
| 10000  | 8,386.38      | 8,939.23       | 0.84              | 0.89               | 552.85       | 6.59%        |
| 11000  | 8,922.14      | 9,492.92       | 0.81              | 0.86               | 570.78       | 6.40%        |
| 12000  | 9,457.90      | 10,046.61      | 0.79              | 0.84               | 588.71       | 6.22%        |
| 14000  | 10,529.42     | 11,153.99      | 0.75              | 0.80               | 624.57       | 5.93%        |
| 16000  | 11,600.94     | 12,261.37      | 0.73              | 0.77               | 660.43       | 5.69%        |
| 18000  | 12,672.46     | 13,368.75      | 0.70              | 0.74               | 696.29       | 5.49%        |
| 20000  | 13,743.98     | 14,476.13      | 0.69              | 0.72               | 732.15       | 5.33%        |
| 22000  | 14,815.50     | 15,583.51      | 0.67              | 0.71               | 768.01       | 5.18%        |
| 24000  | 15,887.02     | 16,690.89      | 0.66              | 0.70               | 803.87       | 5.06%        |
| 26000  | 16,958.54     | 17,798.27      | 0.65              | 0.68               | 839.73       | 4.95%        |
| 28000  | 18,030.06     | 18,905.65      | 0.64              | 0.68               | 875.59       | 4.86%        |
| 30000  | 19,101.58     | 20,013.03      | 0.64              | 0.67               | 911.45       | 4.77%        |
| 35000  | 21,780.38     | 22,781.48      | 0.62              | 0.65               | 1,001.10     | 4.60%        |
| 40000  | 24,459.18     | 25,549.93      | 0.61              | 0.64               | 1,090.75     | 4.46%        |
| 43000  | 26,066.46     | 27,211.00      | 0.61              | 0.63               | 1,144.54     | 4.39%        |
| 45000  | 27,137.98     | 28,318.38      | 0.60              | 0.63               | 1,180.40     | 4.35%        |
| 50000  | 29,816.78     | 31,086.83      | 0.60              | 0.62               | 1,270.05     | 4.26%        |
| 54000  | 31,959.82     | 33,301.59      | 0.59              | 0.62               | 1,341.77     | 4.20%        |
| 60000  | 35,174.38     | 36,623.73      | 0.59              | 0.61               | 1,449.35     | 4.12%        |
| 70000  | 40,531.98     | 42,160.63      | 0.58              | 0.60               | 1,628.65     | 4.02%        |
| 80000  | 45,889.58     | 47,697.53      | 0.57              | 0.60               | 1,807.95     | 3.94%        |
| 90000  | 51,247.18     | 53,234.43      | 0.57              | 0.59               | 1,987.25     | 3.88%        |
| 95000  | 53,925.98     | 56,002.88      | 0.57              | 0.59               | 2,076.90     | 3.85%        |
| 100000 | 56,604.78     | 58,771.33      | 0.57              | 0.59               | 2,166.55     | 3.83%        |
| 108000 | 60,890.86     | 63,200.85      | 0.56              | 0.59               | 2,309.99     | 3.79%        |
| 150000 | 83,392.78     | 86,455.83      | 0.56              | 0.58               | 3,063.05     | 3.67%        |
| 200000 | 110,180.78    | 114,140.33     | 0.55              | 0.57               | 3,959.55     | 3.59%        |
| 250000 | 136,968.78    | 141,824.83     | 0.55              | 0.57               | 4,856.05     | 3.55%        |
| 300000 | 163,756.78    | 169,509.33     | 0.55              | 0.57               | 5,752.55     | 3.51%        |
| 350000 | 190,544.78    | 197,193.83     | 0.54              | 0.56               | 6,649.05     | 3.49%        |
| 400000 | 217,332.78    | 224,878.33     | 0.54              | 0.56               | 7,545.55     | 3.47%        |
| 450000 | 244,120.78    | 252,562.83     | 0.54              | 0.56               | 8,442.05     | 3.46%        |
| 500000 | 270,908.78    | 280,247.33     | 0.54              | 0.56               | 9,338.55     | 3.45%        |

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<br>RATES | PROPOSED<br>RATES |
|------------------------|------------------|-------------------|
| CUSTOMER CHARGE        | \$ 5,841.18      | \$ 5,841.18       |
| C&I NETWORK CHARGE     | \$ -             | \$ 373.55         |
| ALL GAS CONSUMED       | \$ 0.10347       | \$ 0.11956        |
| RIDER PGCC             | \$ 0.29503       | \$ 0.29503        |
| RIDER PGDC             | \$ 0.12373       | \$ 0.12373        |
| GAS PROCUREMENT CHARGE | \$ 0.00695       | \$ 0.00695        |
| COMMODITY E-FACTOR     | \$ (0.00525)     | \$ (0.00525)      |
| STATE TAX ADJUSTMENT   | 0.000%           | 0.000%            |

| THM    | Present<br>\$ | Proposed<br>\$ | Present<br>\$/Thm | Proposed<br>\$/Thm | DIFFERENCE   |              |
|--------|---------------|----------------|-------------------|--------------------|--------------|--------------|
|        |               |                |                   |                    | Amount<br>\$ | Percent<br>% |
| Usage  |               |                |                   |                    |              |              |
| 0      | 5,841.18      | 6,214.73       |                   |                    | 373.55       | 6.40%        |
| 5      | 5,843.80      | 6,217.43       | 1,168.76          | 1,243.49           | 373.63       | 6.39%        |
| 10     | 5,846.42      | 6,220.13       | 584.64            | 622.01             | 373.71       | 6.39%        |
| 25     | 5,854.28      | 6,228.23       | 234.17            | 249.13             | 373.95       | 6.39%        |
| 50     | 5,867.38      | 6,241.73       | 117.35            | 124.83             | 374.35       | 6.38%        |
| 100    | 5,893.57      | 6,268.73       | 58.94             | 62.69              | 375.16       | 6.37%        |
| 200    | 5,945.97      | 6,322.74       | 29.73             | 31.61              | 376.77       | 6.34%        |
| 300    | 5,998.37      | 6,376.75       | 19.99             | 21.26              | 378.38       | 6.31%        |
| 400    | 6,050.77      | 6,430.76       | 15.13             | 16.08              | 379.99       | 6.28%        |
| 500    | 6,103.17      | 6,484.77       | 12.21             | 12.97              | 381.60       | 6.25%        |
| 700    | 6,207.95      | 6,592.77       | 8.87              | 9.42               | 384.82       | 6.20%        |
| 900    | 6,312.73      | 6,700.77       | 7.01              | 7.45               | 388.04       | 6.15%        |
| 1500   | 6,627.09      | 7,024.79       | 4.42              | 4.68               | 397.70       | 6.00%        |
| 3000   | 7,412.99      | 7,834.82       | 2.47              | 2.61               | 421.83       | 5.69%        |
| 8000   | 10,032.64     | 10,534.92      | 1.25              | 1.32               | 502.28       | 5.01%        |
| 10000  | 11,080.50     | 11,614.96      | 1.11              | 1.16               | 534.46       | 4.82%        |
| 11000  | 11,604.43     | 12,154.98      | 1.05              | 1.10               | 550.55       | 4.74%        |
| 12000  | 12,128.36     | 12,695.00      | 1.01              | 1.06               | 566.64       | 4.67%        |
| 14000  | 13,176.22     | 13,775.04      | 0.94              | 0.98               | 598.82       | 4.54%        |
| 16000  | 14,224.08     | 14,855.08      | 0.89              | 0.93               | 631.00       | 4.44%        |
| 18000  | 15,271.94     | 15,935.12      | 0.85              | 0.89               | 663.18       | 4.34%        |
| 20000  | 16,319.80     | 17,015.16      | 0.82              | 0.85               | 695.36       | 4.26%        |
| 22000  | 17,367.66     | 18,095.20      | 0.79              | 0.82               | 727.54       | 4.19%        |
| 24000  | 18,415.52     | 19,175.24      | 0.77              | 0.80               | 759.72       | 4.13%        |
| 26000  | 19,463.38     | 20,255.28      | 0.75              | 0.78               | 791.90       | 4.07%        |
| 28000  | 20,511.24     | 21,335.32      | 0.73              | 0.76               | 824.08       | 4.02%        |
| 30000  | 21,559.10     | 22,415.36      | 0.72              | 0.75               | 856.26       | 3.97%        |
| 35000  | 24,178.75     | 25,115.46      | 0.69              | 0.72               | 936.71       | 3.87%        |
| 40000  | 26,798.40     | 27,815.56      | 0.67              | 0.70               | 1,017.16     | 3.80%        |
| 43000  | 28,370.19     | 29,435.62      | 0.66              | 0.68               | 1,065.43     | 3.76%        |
| 45000  | 29,418.05     | 30,515.66      | 0.65              | 0.68               | 1,097.61     | 3.73%        |
| 50000  | 32,037.70     | 33,215.76      | 0.64              | 0.66               | 1,178.06     | 3.68%        |
| 54000  | 34,133.42     | 35,375.84      | 0.63              | 0.66               | 1,242.42     | 3.64%        |
| 60000  | 37,277.00     | 38,615.96      | 0.62              | 0.64               | 1,338.96     | 3.59%        |
| 70000  | 42,516.30     | 44,016.16      | 0.61              | 0.63               | 1,499.86     | 3.53%        |
| 80000  | 47,755.60     | 49,416.36      | 0.60              | 0.62               | 1,660.76     | 3.48%        |
| 90000  | 52,994.90     | 54,816.56      | 0.59              | 0.61               | 1,821.66     | 3.44%        |
| 95000  | 55,614.55     | 57,516.66      | 0.59              | 0.61               | 1,902.11     | 3.42%        |
| 100000 | 58,234.20     | 60,216.76      | 0.58              | 0.60               | 1,982.56     | 3.40%        |
| 108000 | 62,425.64     | 64,536.92      | 0.58              | 0.60               | 2,111.28     | 3.38%        |
| 150000 | 84,430.70     | 87,217.76      | 0.56              | 0.58               | 2,787.06     | 3.30%        |
| 200000 | 110,627.20    | 114,218.76     | 0.55              | 0.57               | 3,591.56     | 3.25%        |
| 250000 | 136,823.70    | 141,219.76     | 0.55              | 0.56               | 4,396.06     | 3.21%        |
| 300000 | 163,020.20    | 168,220.76     | 0.54              | 0.56               | 5,200.56     | 3.19%        |
| 350000 | 189,216.70    | 195,221.76     | 0.54              | 0.56               | 6,005.06     | 3.17%        |
| 400000 | 215,413.20    | 222,222.76     | 0.54              | 0.56               | 6,809.56     | 3.16%        |
| 450000 | 241,609.70    | 249,223.76     | 0.54              | 0.55               | 7,614.06     | 3.15%        |
| 500000 | 267,806.20    | 276,224.76     | 0.54              | 0.55               | 8,418.56     | 3.14%        |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
COMPARISON OF MONTHLY BILLS  
LARGE GENERAL SALES SERVICE  
GREATER THAN 7,500,000 THM

|                        | PRESENT<br>RATES | PROPOSED<br>RATES |
|------------------------|------------------|-------------------|
| CUSTOMER CHARGE        | \$ 8,653.60      | \$ 8,653.60       |
| C&I NETWORK CHARGE     | \$ -             | \$ 373.55         |
| ALL GAS CONSUMED       | \$ 0.06157       | \$ 0.07115        |
| RIDER PGCC             | \$ 0.29503       | \$ 0.29503        |
| RIDER PGDC             | \$ 0.12373       | \$ 0.12373        |
| GAS PROCUREMENT CHARGE | \$ 0.00695       | \$ 0.00695        |
| COMMODITY E-FACTOR     | \$ (0.00525)     | \$ (0.00525)      |
| STATE TAX ADJUSTMENT   | 0.000%           | 0.000%            |

| THM    | Present<br>\$ | Proposed<br>\$ | Present<br>\$/Thm | Proposed<br>\$/Thm | DIFFERENCE   |              |
|--------|---------------|----------------|-------------------|--------------------|--------------|--------------|
|        |               |                |                   |                    | Amount<br>\$ | Percent<br>% |
| Usage  |               |                |                   |                    |              |              |
| 0      | 8,653.60      | 9,027.15       |                   |                    | 373.55       | 4.32%        |
| 5      | 8,656.01      | 9,029.61       | 1,731.20          | 1,805.92           | 373.60       | 4.32%        |
| 10     | 8,658.42      | 9,032.07       | 865.84            | 903.21             | 373.65       | 4.32%        |
| 25     | 8,665.65      | 9,039.45       | 346.63            | 361.58             | 373.80       | 4.31%        |
| 50     | 8,677.70      | 9,051.74       | 173.55            | 181.03             | 374.04       | 4.31%        |
| 100    | 8,701.80      | 9,076.32       | 87.02             | 90.76              | 374.52       | 4.30%        |
| 200    | 8,750.01      | 9,125.49       | 43.75             | 45.63              | 375.48       | 4.29%        |
| 300    | 8,798.22      | 9,174.66       | 29.33             | 30.58              | 376.44       | 4.28%        |
| 400    | 8,846.43      | 9,223.83       | 22.12             | 23.06              | 377.40       | 4.27%        |
| 500    | 8,894.64      | 9,273.00       | 17.79             | 18.55              | 378.36       | 4.25%        |
| 700    | 8,991.04      | 9,371.32       | 12.84             | 13.39              | 380.28       | 4.23%        |
| 900    | 9,087.44      | 9,469.64       | 10.10             | 10.52              | 382.20       | 4.21%        |
| 1500   | 9,376.66      | 9,764.61       | 6.25              | 6.51               | 387.95       | 4.14%        |
| 3000   | 10,099.71     | 10,502.03      | 3.37              | 3.50               | 402.32       | 3.98%        |
| 8000   | 12,509.86     | 12,960.08      | 1.56              | 1.62               | 450.22       | 3.60%        |
| 10000  | 13,473.92     | 13,943.30      | 1.35              | 1.39               | 469.38       | 3.48%        |
| 11000  | 13,955.95     | 14,434.91      | 1.27              | 1.31               | 478.96       | 3.43%        |
| 12000  | 14,437.98     | 14,926.52      | 1.20              | 1.24               | 488.54       | 3.38%        |
| 14000  | 15,402.04     | 15,909.74      | 1.10              | 1.14               | 507.70       | 3.30%        |
| 16000  | 16,366.10     | 16,892.96      | 1.02              | 1.06               | 526.86       | 3.22%        |
| 18000  | 17,330.16     | 17,876.18      | 0.96              | 0.99               | 546.02       | 3.15%        |
| 20000  | 18,294.22     | 18,859.40      | 0.91              | 0.94               | 565.18       | 3.09%        |
| 22000  | 19,258.28     | 19,842.62      | 0.88              | 0.90               | 584.34       | 3.03%        |
| 24000  | 20,222.34     | 20,825.84      | 0.84              | 0.87               | 603.50       | 2.98%        |
| 26000  | 21,186.40     | 21,809.06      | 0.81              | 0.84               | 622.66       | 2.94%        |
| 28000  | 22,150.46     | 22,792.28      | 0.79              | 0.81               | 641.82       | 2.90%        |
| 30000  | 23,114.52     | 23,775.50      | 0.77              | 0.79               | 660.98       | 2.86%        |
| 35000  | 25,524.67     | 26,233.55      | 0.73              | 0.75               | 708.88       | 2.78%        |
| 40000  | 27,934.82     | 28,691.60      | 0.70              | 0.72               | 756.78       | 2.71%        |
| 43000  | 29,380.91     | 30,166.43      | 0.68              | 0.70               | 785.52       | 2.67%        |
| 45000  | 30,344.97     | 31,149.65      | 0.67              | 0.69               | 804.68       | 2.65%        |
| 50000  | 32,755.12     | 33,607.70      | 0.66              | 0.67               | 852.58       | 2.60%        |
| 54000  | 34,683.24     | 35,574.14      | 0.64              | 0.66               | 890.90       | 2.57%        |
| 60000  | 37,575.42     | 38,523.80      | 0.63              | 0.64               | 948.38       | 2.52%        |
| 70000  | 42,395.72     | 43,439.90      | 0.61              | 0.62               | 1,044.18     | 2.46%        |
| 80000  | 47,216.02     | 48,356.00      | 0.59              | 0.60               | 1,139.98     | 2.41%        |
| 90000  | 52,036.32     | 53,272.10      | 0.58              | 0.59               | 1,235.78     | 2.37%        |
| 95000  | 54,446.47     | 55,730.15      | 0.57              | 0.59               | 1,283.68     | 2.36%        |
| 100000 | 56,856.62     | 58,188.20      | 0.57              | 0.58               | 1,331.58     | 2.34%        |
| 108000 | 60,712.86     | 62,121.08      | 0.56              | 0.58               | 1,408.22     | 2.32%        |
| 150000 | 80,958.12     | 82,768.70      | 0.54              | 0.55               | 1,810.58     | 2.24%        |
| 200000 | 105,059.62    | 107,349.20     | 0.53              | 0.54               | 2,289.58     | 2.18%        |
| 250000 | 129,161.12    | 131,929.70     | 0.52              | 0.53               | 2,768.58     | 2.14%        |
| 300000 | 153,262.62    | 156,510.20     | 0.51              | 0.52               | 3,247.58     | 2.12%        |
| 350000 | 177,364.12    | 181,090.70     | 0.51              | 0.52               | 3,726.58     | 2.10%        |
| 400000 | 201,465.62    | 205,671.20     | 0.50              | 0.51               | 4,205.58     | 2.09%        |
| 450000 | 225,567.12    | 230,251.70     | 0.50              | 0.51               | 4,684.58     | 2.08%        |
| 500000 | 249,668.62    | 254,832.20     | 0.50              | 0.51               | 5,163.58     | 2.07%        |

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, 2018. Schedule 2 is for the Fully Projected Future Test Year which is for the twelve-month period ending December 31, 2019. 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, 2018

|                                    | <u>(MDth)</u> |
|------------------------------------|---------------|
| Annualized Sales (Exhibit No. 103) | 34,355        |
| <u>Sources of Gas</u>              |               |
| Interstate Pipeline Purchases      | 33,266        |
| City Gate Purchases                | 0             |
| Local Production                   | 255           |
| Storage                            | 833           |
| Total                              | 34,355        |

Schedule 2: Twelve Month Ending December 31, 2019

|                                    | <u>(MDth)</u> |
|------------------------------------|---------------|
| Annualized Sales (Exhibit No. 103) | 34,711        |
| <u>Sources of Gas</u>              |               |
| Interstate Pipeline Purchases      | 34,652        |
| City Gate Purchases                | 0             |
| Local Production                   | 255           |
| Storage                            | (196)         |
| Total                              | 34,711        |

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 2016 and November 2017.

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 2016 and November 2017.

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 2016 and November 2017.

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, 2019  
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, 2018 is (\$2,797,541) and for twelve months ending December 31, 2019 is (\$1,592,995). 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, 2018  
Adjustments to Purchased Gas Expense  
53.62

(1) Purchased Gas Costs \$  
159,116,399  
Per Books for the Twelve Months Ended  
November 30, 2018

(2) Purchased Gas Cost  
to be Recovered in Base Tariff Rates:

| <u>Rate Schedule</u>                      | <u>Total<br/>Rate</u> | <u>Adjusted<br/>Volumes</u> | <u>Gas<br/>Cost</u> |
|-------------------------------------------|-----------------------|-----------------------------|---------------------|
| <b><u>Gas Supply Expense</u></b>          |                       |                             |                     |
| 1/ Residential Sales Service - RSS        | 4.1351                | 27,393,345                  | 113,274,221         |
| Small General Sales Service - SGSS        | 4.1351                | 8,636,671                   | 35,713,498          |
| Negotiated Sales Service - NSS            | Varies                | 72,700                      | 268,017             |
| Large General Sales Service - LGSS        | 4.1351                | 749,885                     | 3,100,850           |
| Residential Distribution Service - RDS    | 0.9266                | 6,893,000                   | 6,387,054           |
| Small Commercial Distribution - SCD       | 0.9266                | 2,330,998                   | 2,159,903           |
| Small General Distribution Service - SGDS | 1.2373                | 816,615                     | <u>1,010,397</u>    |
| Total Gas Supply Expense                  |                       |                             | 161,913,940         |
| Gas Supply Expense Adjustment             |                       |                             | (2,797,541)         |

1/ Includes CAP volumes

Columbia Gas of Pennsylvania, Inc.  
Operations and Maintenance Expense Adjustments  
To the Twelve Months Ended December 31, 2019  
Adjustments to Purchased Gas Expense  
53.62

(1) Purchased Gas Costs \$ 161,913,940  
Per Books for the Twelve Months Ended  
December 31, 2019

(2) Purchased Gas Cost  
to be Recovered in Base Tariff Rates:

| <u>Rate Schedule</u>                      | <u>Total<br/>Rate</u> | <u>Adjusted<br/>Volumes</u> | <u>Gas<br/>Cost</u> |
|-------------------------------------------|-----------------------|-----------------------------|---------------------|
| <b><u>Gas Supply Expense</u></b>          |                       |                             |                     |
| 1/ Residential Sales Service - RSS        | 4.1351                | 27,512,601                  | 113,767,356         |
| Small General Sales Service - SGSS        | 4.1351                | 8,867,993                   | 36,670,037          |
| Negotiated Sales Service - NSS            | Varies                | 72,700                      | 268,017             |
| Large General Sales Service - LGSS        | 4.1351                | 766,053                     | 3,167,707           |
| Residential Distribution Service - RDS    | 0.9266                | 6,925,000                   | 6,416,705           |
| Small Commercial Distribution - SCD       | 0.9266                | 2,365,980                   | 2,192,317           |
| Small General Distribution Service - SGDS | 1.2373                | 828,252                     | <u>1,024,796</u>    |
| Total Gas Supply Expense                  |                       |                             | 163,506,935         |
| Gas Supply Expense Adjustment             |                       |                             | (1,592,995)         |

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 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.